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"FRUIT WORLD OF AUSTRALASIA."

Representing the Deciduous, Citrus and Dried Fruits Industry of Australasia.

Published the First of each Month.

Editorial and Management Notices.

Articles and Photographs.—The Editor will always be very pleased to receive articles and photographs for publication. Articles on spraying, pruning, drainage, marketing, and other cultural matters, and reports of meetings, are welcomed. Please write on one side of paper only; include name and address (not necessarily for publication). Press matter sent in an open envelope, marked "Printer's MSS.," postage rate: 2 ozs., 1½d. Photographs, if sent in an open-ended package, marked "Photos. only." will travel at 2 ozs., 1½d. A short description of the photos. should be written on the back.

We do not hold ourselves responsible for the views expressed by our correspondents.

Subscriptions.

The annual subscription, post free within Australia and New Zealand, is 8/6. All other places, 10/6, post free. New subscriptions can commence at any date. Subscribers should notify us immediately of any change of address.

Renewal Subscriptions are due during the last month of the term covered by the previous payment, and unless notified to the contrary, the fact that the subscriber continues to accept delivery of the journal, is taken as proof that continuation of the subscription is desired, and we will continue to send regularly until notified in writing or copies are returned through the post.

Advertisements.

"The Fruit World of Australasia" is an advertising medium of proved value. Advertising rates may be had on application to our Head Office, or to agents in the various States, as set out below.

Changes of copy for advertisements must be in our hands on or before the 17th of the month prior to publication.

Readers are asked to make their purchases from our advertisers, who cover all lines of interest to orchardists, at the same time mentioning this journal. By so doing, the grower, the advertiser, and this paper will benefit.

Every care is taken to publish advertisements from reliable houses only, and to see that advertisements of an undesirable nature are not published. The management reserve the right to refuse to publish any announcements that they may regard as undesirable, either from the point of view of the goods offered or in the wording of the advertisement, notwithstanding the fact that a contract may have been entered into for the use of a certain space.

"The Fruit World" Offices (where copies and full particulars are obtainable) are as follows:—

Victoria (Head Office): 9 Queen Street, Melbourne. **New South Wales:** Carruthers, Farrum & Co., 77 King Street, Sydney. **South Australia:** W. F. McConnell, Grenfell Buildings, Grenfell Street, Adelaide. **Tasmania:** Saunders & Co., Murray Street, Hobart. **Western Australia:** D. L. Hetherington, Colonial Mutual Buildings, St. George's Terrace, Perth. **Queensland:** Gordon & Gotch Ltd., Queen Street, Brisbane. **New Zealand:** Gordon & Gotch Ltd., Wellington, Dunedin and Auckland. **Great Britain:** Harvey H. Mason, 1 Mitre Court, Fleet Street, London, E.C., England.

R. E. BOARDMAN, A.F.I.A., Managing Director and Editor.

E. H. WRAGG, Secretary and Advertising Manager.

Tasmanian Director: HON. L. M. SHOOBRIDGE, M.L.C.

THOUGHT FOR THE MONTH.

I expect to pass through this world but once. Any good, therefore, any kindness or any service I can render to any soul of man or animal, let me do it now. Let me not neglect it or defer it, for I shall not pass this way again.

—T. Carlyle.

EMPIRE PREFERENCE.

British Decision will be Reversed.

EARL BIRKENHEAD, addressing a gathering of Canadians in July stated:—

"The decision of Parliament in regard to preference does not represent the views of the people of England. Their decision is not only not irrevocable, but one that shall be revoked."

Earl Birkenhead continued: "We do not seek to involve you in our domestic disputes, but I ask you to take back this message, that the decision regarding Imperial preference was taken in the teeth of protest. There exists in Great Britain many men with the power of recommending their view to the British electors, who are still aware of the incomparable resources of the mighty Dominions, and the advantages of the preference that you voluntarily gave many years ago, and these, on the moral side, never forget that Canada, like Australia, in the greatest crisis in our history, ranged herself on our side. I put this that there should be absolute equality between the daughter States and the Home Country. There is no question of dictating a policy on either side."

EMPIRE DEVELOPMENT UNION.

Preferential Trade within the British Empire Desired.

The Empire Development Union is established in Great Britain and in various parts of the Empire. The principal objects are to develop the Empire, and to translate into legislative enactments the decisions of the Imperial Economic Conferences.

The Empire Development Union is thus working to secure legislation in the British Parliament for preferential trade within the Empire.

Mr. F. L. McDougall recently addressed the Victorian branch, pointing out that Australia gave preferences to Great Britain amounting to £7,500,000, and received in return preference to the extent of only £500,000. Australia was Great Britain's second best customer.

The Empire Development needs additional members. Those interested are invited to write to the Hon. Secretary of the Victorian Branch, Mr. R. E. Boardman, 9 Queen-street, Melbourne.

PURE FRUIT JUICE CAMPAIGN.

Many Impure Synthetic Compounds are now Offered to the Public.

The South Australian Fruitgrowers' Association has inaugurated a campaign against the use of impure synthetic compounds which are now freely offered to the general public masquerading as "fruit juices."

A noted Australian food chemist states that as regards Raspberry Syrup, the syrup must be clear, of a bright red colour, and possess the characteristic smell and taste of Raspberries: these qualities being especially marked on diluting the juice with water. Foreign colors—plant, insect, or coal tar dyes must not be present. A pure syrup must contain no preservatives. Raspberry syrup, prepared in the proper manner, keeps splendidly for years without preservatives. Substitutes for cane sugar (starch, syrup, glucose, saccharin and other artificial sweet substances) must not be present.

Of 44 samples analysed in Victoria some years ago, only one was found unadulterated with coal tar dye, cochineal, salicylic acid or saccharin. The single unadulterated sample excelled all the others in flavour, colour and aroma. Thirty-five out of the 44 samples contained salicylic acid (in South Australia 2 grains of salicylic acid is allowed to the pint).

Stop Masquerading.

If every beverage bearing a fruit name or emblem were made of but 50 per cent. of the fruit it claims to represent, practically every bit of fruit we could raise would be consumed by this method, in addition to the regular channels, states Mr. H. Penfold Hyland, of South Australia.

If the Federal Government would introduce in Australia, legislation similar to that recently enacted in U.S.A. compelling the use of pure fruit in compounds advertised as "fruit juices, etc.," the burdens of the fruitgrower would be greatly relieved, and the public would receive a pure and wholesome article instead of synthetic compounds.

Mr. E. Naughton, General Secretary of the South Australian Fruitgrowers' and Market Gardeners' Association, writes:—"Mr. Percy Wilkinson, Federal Government Analyst, states that it is commercially possible to manufacture fruit juices of 75 per cent. fruit juice.

"We desire to have legislation enacted to secure pure fruit juices being manufactured from the **Lemon, Orange, Raspberry, Blackberry, Red Currant, Black Currant, Pineapple, Apricot and Apple.**

"A very fine drink can be made from the Apricot in the form of a liqueur. The imported article is on the Australian market and is well spoken of, but owing to certain res-

trictions it cannot be manufactured in the Commonwealth.

"The Californians have put a Grape fruit juice on our market of 75 per cent. pure fruit juice. It is labelled 'Sealed Heart Grape Fruit,' retail price 2/- per 2 lb. tin, obtainable at Crawfords, King William-street, Adelaide.

"We object to temperance drinks of any kind being sold under the name, label, or purporting to be the name of a fruit or fruits, and are asking our State Government to support us in our request."

Verses Acknowledged.

S.F. (Wandin)).—Many thanks for verses. We regret they are not quite suitable, the lines and rhyming being irregular. The theme, however, is an excellent one, and we congratulate you on your effort. You omitted to enclose your name and address.

NEWS IN BRIEF.

The Commonwealth Grading Regulations for Apples and Pears are seriously challenged by N.S.W. fruitgrowers.

The good work of the Western Australian Railways Department in advertising fruit is dealt with in this issue.

A Sydney medical practitioner has demonstrated that fruit is essential to health. It is not a luxury, as some people think. Growers should broadcast the article from Dr. Purdy in this issue.

The first Australian Citrus Research Station has been established at Griffith (Murrumbidgee Irrigation Area), N.S.W. This is an important move in the right direction. May the other States soon have a similar beneficial enterprise.

An interesting comparison in market prices for Mandarins and Pears in Brisbane is given by a correspondent in this issue. The Mandarins came from Galston, Arcadia and Dural in N.S.W., and the Pears from Harcourt, Victoria.

That the cultivation and drying of the Smyrna Fig was one of the best propositions for growers in the Mid Murray Irrigation Areas, was definitely stated by Mr. C. G. Savage, S. Australian Deputy Horticultural Instructor, at the recent conference of the Australian Association for the Advancement of Science.

The Annual Conference of the Fruitgrowers' Cool stores Association of Victoria, held at Frankston (V.) early in September, was a great success.

Oil Sprays for Apricot Trees.—Experiments are being conducted at Ardmona, Victoria, on Apricots in spraying the trees with oil, not merely for the purpose of combating pests, but in order to soften the bark with a view of assisting the tree in producing a greater quantity of new lateral shoots.

American penny packets of Raisins have met with a big response in China.

A bright example of successful co-operation is seen in the development of the Fruitgrowers' Cool Stores in Victoria.

It is reported that the Western Australian (Labor) Government is in favor of a compulsory Fruit Marketing system as inaugurated in Queensland.

The success of the Queensland system has yet to be proved.

Hints on the cincturing of Currants are given by our River Murray correspondent in this issue.

Spring sprayings of deciduous trees and vines to check fungus diseases and codlin moth need to be done with great thoroughness.

Retail fruit traders are seeking representation on the State Fruit Advisory Boards.

The installation of wireless sets is doing much to reduce the loneliness of country life. "Wireless" enables concerts, lectures, "bed time" stories, etc., to be picked up. By means of a "loud speaker" the broadcasted items can be heard and enjoyed by everyone in the room. A good wireless set can be installed for about £50.

PERSONAL.

Hon. L. M. Shoobridge, M.L.C., of Tasmania, has just completed a month's treatment at the mineral springs at Moree, N.S.W., to try and get rid of attacks of rheumatism. Every Australian fruitgrower will wish the "father of the fruit industry" speedy recovery and good health.

Another casualty during September was J. H. Lang, of Harcourt, who fell a victim to a particularly severe attack of influenza.

Mr. F. W. Wakefield, whose researches into the cold storage and transport of fruit have won well-merited distinction, arrived safely in London on August 13th, and proceeded to Bristol under his engagement to the University there.

We expect to publish Mr. Wakefield's report on the "Esperance Bay" citrus cargo next issue.

Mr. A. H. Ashbolt, ex-Agent-General in England for Tasmania, has returned to the Island State. Mr. Ashbolt has projected a big scheme for handling Australian primary products in Great Britain.

An appreciated Queensland visitor to Melbourne was Mr. W. Rowlands, Fruit Marketing Instructor of the Queensland Department of Agriculture. Mr. Rowlands was in charge of the Queensland fruit exhibit at the Melbourne Royal Agricultural Show.

Captain W. J. Wade, representative in Australia of the Port of Manchester, delivered an instructive address before the Victorian Institute of Advertising Men in Melbourne on September 23.

Mr. A. W. Palfreyman, Managing Director of Australasian Jam Co. Pty. Ltd., who has been on an extended trip abroad, is expected back in Melbourne during October.

Railway Promotions in Victoria.

Mr. M. J. Canny has been appointed General Superintendent of Transportation in place of Mr. T. B. Molomby, the latter having been appointed a Commissioner to fill the position vacated by Mr. C. Miscamble.

Mr. C. Miscamble, the new Tasmanian Railways Commissioner, has made a good impression since taking up his duties in the Island State. The Commissioner made a tour of the Tasmanian Railways, and is gathering first hand information to assist him in his tasks.

BREEZY NOTES.

The Governor of Victoria and Lady Stradbroke recently toured inland Australia in Ford cars. It is reported they had a rattling good time.

According to reports there were sparks flying at a recent deputation from the Western Australian State Fruit Advisory Board to the Minister for Agriculture. It is understood one delegate subsequently went to his home to Cool-up.

She: "What are you thinking about?"
He: "Same thing you are."
She: "Don't you dare move."

SHOWS TO COME.

New South Wales.

1925.

Batlow	....	....	March 17 & 18

Adelaide Show.—The Annual South Australian Agricultural Show was held at Adelaide at the end of September, and was highly successful. The fruit exhibits were of excellent quality.

COMMONWEALTH LEGISLATION IN THE DRIED FRUITS INDUSTRY.

Three Vital Bills Have Become Law.

IN accordance with his promise, the Prime Minister, (Mr. Bruce) introduced his Bill into the Federal Parliament to authorise the payment of advances to growers of dried fruits. This is termed the Dried Fruits Advances Act 1924, and having passed all stages has become law.

The Act authorises certain banking procedure to enable advances to be paid to growers on or before 31st December 1924, on the export proportion of their 1924 crop of Lexias, Sultanas and Currants, such fruit to be forwarded to a packing organisation or export merchant in pursuance of a certain export arrangement under which a proportion of these dried fruits forwarded by the grower is to be exported. Also, where a grower exports dried fruits otherwise than in pursuance of the export arrangement, in respect of the actual quantity of dried fruits produced by the grower during the year 1924, and exported by him on or before 31st December 1924.

The Minister for Trade and Customs must approve of the quality of the fruit sent forward.

Should the dried fruits produced in the year 1924 by a grower who is a party to the export arrangement, prove to be below the required export standard and be not forwarded to a packing organisation or export merchant, the Minister may, if such proportion of the dried fruits as he approves be sold for distillation purposes on or before the 31st December 1924, authorise the payment of an advance upon that proportion of dried fruits.

The rates of advances payable are 30/- per ton for dried Currants and £9/0/0 per ton for dried Sultanas and Lexias. One-third of the amount of any advance is payable during the month of September 1924, and the remaining portion in four equal monthly instalments commencing on 1st Oct. 1924.

An advance shall not be paid unless the grower furnishes the prescribed information and undertakes, (a) to expend the advance entirely on material and labor (including maintenance of the grower and his family) in connection with cultural operations; (b) to repay the advance with 6 per cent interest; (c) to deliver the dried fruits produced by him in 1925 to a packing organisation or export merchant approved by the Minister; (d) to permit any authorised person to supervise the cultural operations, and to examine all books etc.; and to comply with such other conditions as the Minister determines.

The repayment of the advance and the payment of interest thereon is a charge on the proceeds of the 1925 crop, after the costs of production and marketing have been met.

The packing organisation to which the grower delivers the 1925 crop is to be held responsible for repayments. If default is made the debt is deemed due to the King.

The Minister may appoint such packing organisations or export merchants as he thinks fit to be the agents of the Commonwealth to pay the advances to growers, and such organisation shall undertake to export from the Commonwealth on or before the 31st December 1924 a prescribed quantity of dried fruits.

No person shall obtain any advance which is not payable, nor obtain payment of an advance by means of any false or misleading statement, under a penalty of £100 or imprisonment for 12 months.

The Governor-General may make regulations (not inconsistent with the Act) prescribing all matters which are deemed necessary for giving effect to this Act, and in particular, for prescribing penalties not exceeding £50 or imprisonment for a period not exceeding 3 months for any breach of the regulations.

* * *

Many growers are taking advantage of the opportunity for securing finance under this scheme, filling in the essential details on forms supplied for that purpose.

* * *

The Federal Government has now introduced a further Bill, the terms of which provide for the establishment of a Board of Control to deal with export.

It is understood that in order to improve distribution arrangements in London, a substantial portion of the vote of £500,000 will be employed. The legislation is directed toward an improvement of packing and grading, co-operation being the basis of the Government's plans. An organisation will be set up in London to ensure that the Australian product will meet foreign competition on a more favorable basis than at present.

DRIED FRUIT EXPORT.

Levy of £37,000 for Control Board.

Following the passing of the bill to appoint a board to control the export of dried fruits, a bill was introduced by the Prime Minister, which passed all stages to provide funds for the board by the imposition of a levy of one-eighth of a penny per lb. on all dried fruit exported, subject to a lower rate being prescribed by the regulations: the money raised to be used for general expenses of the control board and for advertising purposes.

Mr. Gabb (S.A.) said it was expected that a levy of one-eighth of a penny would return £37,000 a year. That seemed far more than was necessary. He moved an amendment that the levy be reduced to one-sixteenth of a penny. He did not think that the growers desired to provide high salaries for members.

The Prime Minister said it was vital that in the first year the board should have ample means. Members of the Control Board might be paid according to the number of meetings held. The Government retained the right to veto anything extravagant.

What of Re-organisation?

Whilst the foregoing matters are being dealt with in Parliament, what is being done to place the industry on a firm basis?

Committees of growers are at work in several of the dried fruit producing settlements seeking for a method that will have all the elements of permanent success.

Some growers are in favor of a Dried Fruit Pool, others are definitely opposed to such a proposal.

Has the Australian market been fully explored? We think not.

Retailers have earnestly pointed out the possibilities for increased trade provided that the grading be done on improved lines; for instance, Sultanas should not be supplied in widely varying sizes; the larger fruit would be better if kept separate for a higher class trade, which would bring correspondingly better prices, whilst the smaller (but equally wholesome) fruit could be sold at a lower figure, thus increasing its sale amongst the masses of the population.

This would undoubtedly mean an alteration in the present method of boxing the fruit at the many packing sheds in the Murray Valley, and is one of the details of internal administration to which the dried fruits industry must give attention.

Also the fact must be faced that the local trade in dried fruit from sources outside of the A.D.F.A. is steadily increasing. It is estimated that in South Australia the "outsider" controls 80 per cent of the local market, in Victoria the "outsider" has approximately 60 per cent to 70 per cent of the trade. All the time A.D.F.A. growers are contributing their quotas for heavy export proportions.

The time is fully due for a quiet intensive study of the whole position of the business of distributing dried fruits both on the local and export markets with especial reference (as regards the local trade) to the recommendations of the retailers.

With a definite policy of business-like re-organisation, adapted to the present day needs of what is admittedly a difficult position, and an educational campaign amongst growers, a bigger and stronger organisation could be built up, especially as the Government seems willing to advance the necessary finance under effective guarantees.

Indications are not lacking that growers are becoming restive, and if the expressed intentions of many are carried out the proportion "outside" the A.D.F.A. will be increased.

The whole position is pregnant with possibilities. Growers as a whole we believe, are in favor of organised marketing. The need is for the adoption of a scheme based on present-day needs, and the endorsing of it by the growers.

Dried fruit growers have the large goodwill of the general public of Australia. One striking instance is the offer by the press to assist by the publication, gratis, of educational articles advocating the food and health values of fruit. By accepting this fine offer, and by linking up the services of the medical and dental profession for lectures during "Raisin Week," much valuable publicity could be gained with a minimum of cost.

The position needs to be studied with the idea of inaugurating a scheme that will, by its inherent soundness, appeal to all, so that year by year the position will improve, and win out by sheer merit.

The assistance by the Government is necessarily of a temporary nature, to give breathing space to enable re-organisation to be carried out.

Can we commence now, with all our new problems, and so build that in ten, nay in twenty or thirty years time it will be said that the "foundations were well and truly laid?"

Reciprocal Trade with Canada.

Important Announcement.

Preference of £14 a Ton on Dried Fruits.

Melbourne (27/9/24).

A measure of great importance has been introduced into the Commonwealth Parliament, namely, the ratification of a trade treaty with Canada. The negotiations in relation to this trade treaty have been spread over several years.

The treaty provides that Canada shall receive preference in supplying Australia with fish, newsprint, gloves, type machines, steel tubes, rubber shoes and chassis, etc., whilst certain Australian products receive preference on entering Canada. These goods include fresh meat, canned meat, lard, tallow, eggs, cheese, butter, Onions, dried Apples and other fruits, Raisins, Currants, canned fruit, wines, glue, gelatine, beeswax, canned vegetables, honey, eucalyptus and brandy.

Dried Fruits.

The item dried Apples and other dried fruits included all dried fruit except Raisins and Currants, Prunes and Bananas, Dates and Figs. The present rates under Canadian tariff (stated the Minister for Trade and Customs (Hon. H. E. Pratten), when introducing the Bill, were 17½ per cent. (British Preference) and 25 per cent. (General Tariff). These rates would be altered to 12½ per cent. (B.P.) and 27½ per cent. (G.T.), thus increasing the preference from 7½ per cent. to 15 per cent. Australian dried fruits coming within the item would be admitted at 12½ per cent.

Raisins and Dried Currants.

The proposals with regard to Raisins and dried Currants offered to the Commonwealth the largest opening for trade. The importations of Currants into Canada for the year ended March, 1924, totalled 5,598,000 lb., at an approximate value of £114,000, and the importations of Raisins totalled 38,792,000 lb., to a value of £663,000, making a total importation of Currants and Raisins of 19,800 tons, valued at £777,000. For the year ended March, 1924, Australia exported to Canada Currants to the value of £5.300, and Raisins to the value of £100. In the Canadian tariff there was a suspended item for Raisins and Currants under which these products were to be admitted free (B.P.) and at 3 c. (G.T.). According to the terms of the agreement, this suspended item would be brought into effect.

As a result, Currants and Raisins of Australian origin would be admitted free and have a preference of 3 c., equalling 1½d. per lb., or £14 per ton, as against foreign Currants and Raisins. On the average value of Currants on the figures shown in the Canadian official statistics, £14 per ton was equivalent to 30 per cent. ad valorem, and to 36 per cent. ad valorem on the average value of Raisins. With this substantial preference, Australian Currants and Raisins should have an excellent opportunity of getting a very profitable proportion of Canadian requirements.

Canned Fruits.

Under the present Canadian tariff the duty on canned fruit is 1¾ cent per lb. (B.P.), and 2½ cents (G.T.). The agreement requires the alteration of these rates to 1¼ per cent. per lb. (B.P.) and 3¼ cents (G.T.), giving a preference of 2 cents or 1d. per lb. Australian canned fruit would be admitted at 1¼ cent per lb. Australia had a considerable export trade in canned fruit, and the preference should enable a fair proportion of Canada's trade to be secured.

A.D.F.A. ACTIVITIES.

Dried Fruit Demonstrations.

The Australian Dried Fruits Association has developed a new line of publicity—window displays in Melbourne and suburbs, giving demonstrations in methods of preparing dried fruits; thousands of recipe books have been distributed. At the Royal Show, the sales of 3d. packets of Sultanas averaged 2,000 daily; similar quantities were sold at the All Australian Manufactures' Exhibition.

During Health Week, October 2nd to 9th, demonstrations are being given in making Raisin scones and Raisin bread. A "Vitamine Cafe" has been organised by the A.D.F.A., an attractive menu having been issued in the interests of better health. Mr. W. Alan Edmunds is doing good work in organising this publicity campaign.

ADELAIDE'S "DRIED FRUIT WEEK."

A "Dried Fruit Week" is being conducted in Adelaide by the recently formed Dried Fruit Traders' Association, from September 29th to October 4th inclusive, throughout the metropolitan area. The object is to stimulate sales of dried fruits which must be Australian grown.

It is understood that the matter is receiving the active support of the retail grocers, and some very fine displays of dried fruit will no doubt be made during the special week. Competitive prizes are being offered, and a large number of leaflets are available for distribution by grocers, these containing recipes and numerous ways (many of them entirely new) in which dried fruits can be used.

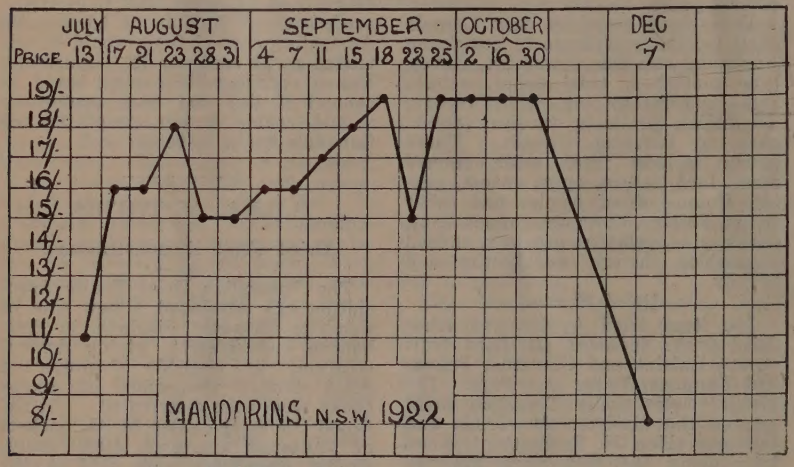
With a big response from the public this special effort will directly benefit everyone connected with the industry.

Fruit in Brisbane.

Mandarins from N.S.W., and Pears from Victoria.

Interesting Comparisons in Prices.

A COMPARISON of market prices is always of interest, and is particularly so when the fluctuations which occur every season are considered in so far as they affect the value of any one variety in more than one season. Lessons of some considerable value can be learned from the compilation and study of price graphs, and the four which are herewith reproduced certainly reveal some significant similarities in seasonal values, writes Mr. Hedley Geeves, Fruit Salesman, Brisbane, Q'land.



Mandarins from N.S.W. in Brisbane in 1922 showing price variations.

In the case of New South Wales Mandarins for the seasons 1922 and 1923, the district referred to is the Galston, Arcadia and Dural area.

It will be observed that in 1922, the season opened on July 13 at 11/- per case. A sharp upward move took values to 16/- by the 17th of the month. In 1923 the season opened much earlier (June 25) at a high level, namely, 15/-, and an acute deflation lowered prices to 9/- by July 5. Supplies practically ceased for about three weeks, when the market had recovered to 15/-. The explanation of the 1923 drop is obvious. A shortage of Queensland Mandarins caused prices to rise to the 15/- level. This price cannot be maintained in June. Local supplies came forward in response to the higher quotations, with the resultant depression in the New South Wales variety.

It can be definitely taken as fact that New South Wales Mandarins will not sell to advantage until the bulk of the Queensland crop has been marketed, and this fact is cause of the slump which occurred in New South Wales' Mandarins early last year.

Another interesting point which can be used to advantage by growers is that there is also a definite finish to the Mandarin season. In 1922, prices ruled high till the end of October. In 1923, a downward move commenced early in the same month of the year. Our experience suggests that August and September are the best months for these Mandarins on Brisbane market, and that growers would be well advised to clear their supplies by the middle of October.

Harcourt (Victoria) is a famous name in the fruit trade in Brisbane, and the reputation that this district holds for late Apples and Pears is second to none.

The Winter Nelis reviewed in the accompanying graphs for 1922 and 1923 show the results of two good seasons. Here again there is a remarkable repetition in the trend of market values. Both seasons opened at 11/-. Actually this date (late March) is too early for this variety. The presence of Nelis on the market at this time of the year affects the prices of such varieties as Gansell Bergamot and Beurre de Capiaumont Pears, besides spoiling the price of the Nelis itself.

April of both years saw a steady upward move, followed by a minor easement.

The general level of 1923 prices was on a higher plane than 1922, but the market fluctuations were very similar.

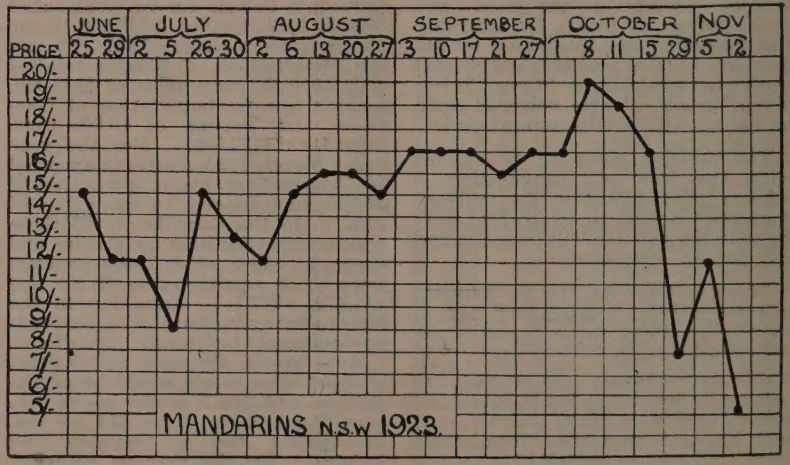
In 1922 Nelis went from 14/- on August 2, to £1 on the 16th. This remarkable rise in two weeks was too sudden to last. The increase to the consumer was so sudden that the demand was affected, and the September values were a little disappointing in consequence.

In 1923 the firming in values was more steady, and there is a pleasing absence of serious deflations in the values for that year.

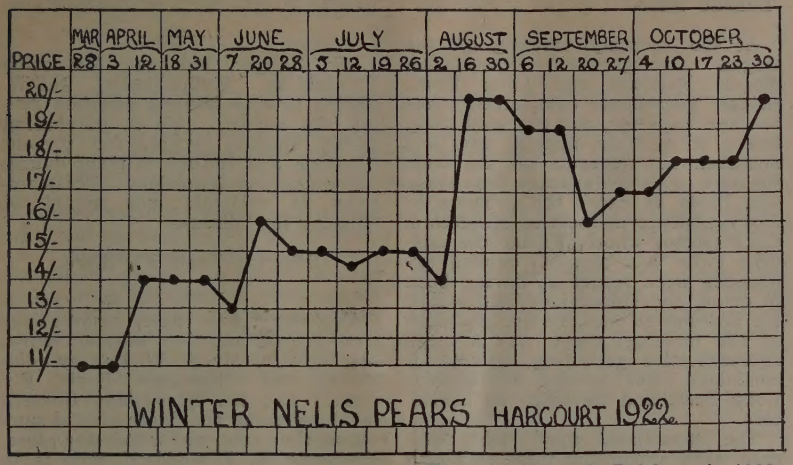
The ideal for which growers and agents should strive is the steady market.

The graph which alternates between high and low values is not reproducing a satisfactory price record. Upward tendencies which are gradual, can be maintained, because the consumer is gradually made to be accustomed to the improved values, and the demand continues to be healthy. Wild fluctuations cause demand to become precarious, and in some cases to practically cease.

It must be remembered that the prices shown in this article are those compiled by ourselves from our own records, and are the expression of actual sales, and something of an



Price fluctuations for N.S.W. Mandarins in Brisbane during 1923.



Graph showing fluctuations in prices of Victorian Pears in Brisbane in 1922

agent's difficulties can be gauged from the fact that in 1922 Mandarins which on September 18th were worth 19/-, dropped to 15/- on the 22nd, and recovered to 19/- by the 25th. It can easily happen unless one is in very close touch with the market that after selling at 15/- on the 22nd of September, prices would rise to 16/- or 17/- on the 25th (which was the date of the next shipment).

It is only by constant application to the subjects of supply and demand that an agent can obtain for the grower the full market rate. No agent can get more than market rates. The difficulty is to get always as much as the market rate will allow.

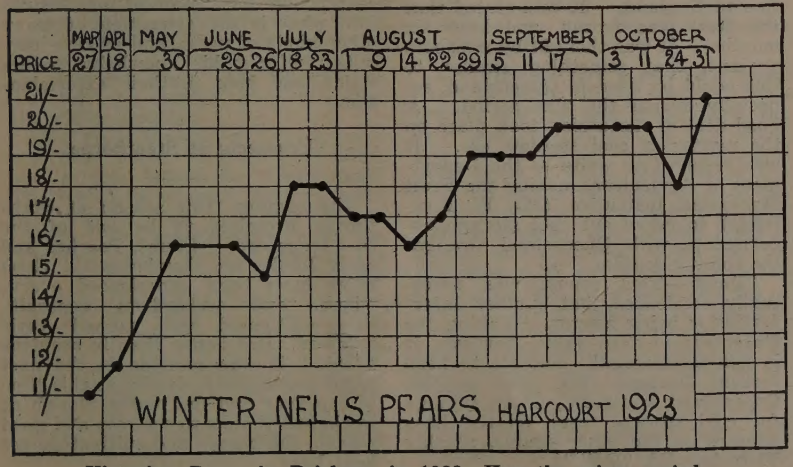
Record Tomato Crop at Bowen.

Expect Quarter Million Cases for Season.

Never in the history of Bowen have larger crops of Tomatoes been harvested than in the present season. Last year approximately 60,000 cases were gathered from June to December. This season, during the month of August, over 100,000 cases were shipped. When it is learned that growers to the number of 130 grow Tomatoes, readers will know what enormous labour is required to pick, grade and pack this quantity.

The main variety grown is "Hurst's Buckeye," raised locally and is very prolific and a heavy bearer, sound and fleshy. Prices have been very good in Sydney, from 6/- to 16/- per half case, whilst during the early season, as high as 25/- was obtained.

The fruit is thoroughly examined before leaving Bowen, by Mr. A. Wooller, Departmental Inspector, who will not allow any undesirable fruit to pass.



Victorian Pears in Brisbane in 1923—How the prices varied.

Queensland.

Banana Grades.

Rigid Inspection for Southern Trade.

At a meeting of the Committee of Direction for fruit marketing, approval was given to an advertising scheme for Bananas in Adelaide, Melbourne, Sydney and Brisbane. It has been decided to hold a "Banana Week" in each of the above cities. Prizes will be given for shop window displays in the suburbs and cities concerned.

This is considered a step in the right direction, and will do a lot of good for the Queensland Banana trade.

Approval was also given to the recommendation of the Banana Group Committee, whereby rigid inspection will take place from a date fixed.

A Banana packing pamphlet has been prepared by Mr. W. Rowlands, Instructor in Fruit Marketing, a copy of which will be sent to every Banana grower, together with a copy of the regulations, intimating as from a certain date, rigid inspection will take place, and complaints received from the South, will be forwarded to the local Associations concerned.

Banana Planting.

Close Planting Condemned.

For some time past, Mr. Munro Hull, of the Eumundi District, has been advocating close 6 x 6 planting for Bananas. His main object in suggesting close planting was to eliminate cleaning and working the plantations.

With a view to ascertaining whether there was any advantage in close planting, many growers have given the system a trial, resulting in its condemnation. The following growers give their opinion after planting several acres 6 x 6:—

Mr. J. C. Winning, Mt. Mellum.—States that he is not satisfied with the 6 x 6 planting, and that Bananas planted so required just as much chipping and cleaning as those planted 12 x 12.

Mr. E. Hart planted several acres 6 x 6, and has now reverted back to the old system, 12 x 12.

Mr. R. S. Lyletons, Landsborough, is another grower who condemns close planting, his plants are 10 x 10, and are doing exceptionally well.

Mr. W. Isambert, Mt. Mellum, states that he planted an area of Bananas 6 x 6 in February, 1923, and he is quite satisfied the system is a failure. The fruit has taken longer to fill out, the bunches are smaller, and the Bananas have cigar-ends. He is getting better results from 10 x 10

and 12 x 12 plantings, and will be putting out a further area this year.

Mr. A. J. Charteris, Mt. Mellum, a prominent grower, advises 12 x 12 planting against 6 x 6, stating that it is much harder work on the plantation if planted 6 x 6. The carrying of bunches from plant to shed is awkward, and the fruit gets knocked about, besides there is just as much chipping and cleaning.

With reference to the statements by Mr. Munro Hull that the coastal ridges will only carry profitable crops for three years, this is not supported generally by growers. Many growers state that if Bananas are grown on suitable soil with shelter and correct aspect, the life will be 8 to 10 years. Banana growing is practically the same as other fruits. If you plant, say, Oranges or Apples on unsuitable soils or situations, you must have failure.

Melbourne Show.

At the time of writing, the Fruit Marketing Instructor (Mr. W. Rowlands) has proceeded to Melbourne to display Queensland fruits at the Royal Agricultural Society's Show. The object of the exhibit is to show the southern public that Queensland can grow Bananas of good quality. Fruit is being supplied from the Gympie, Cooran, Woombye, Landsborough and Nambour districts, and will be comprised of Bananas and Pineapples (mainly), citrus fruits, Papaws and Cocoanuts.

Bananas are being packed in several different ways for experimental purposes, and bunches are being packed in bran, sawdust, leaves and other packing to enable Queenslanders to find out which method of packing is suitable for southern markets.

A heavy crop of Bananas is to be gathered from now on. The quality will be superior to that which was being shipped during the drought periods. The question of grading and packing is being tackled by the Fruit Marketing Instructor. Therefore, southern buyers can look forward to a decided improvement in Queensland Bananas.

Banana Packing Classes.

With the close of the citrus season, the classes of instruction in packing will finish until next season, when a start will be made in the Howard district, during April next.

In the meantime, boys over 16 years of age, attending rural district schools, whose parents have Banana plantations, will attend Banana grading and packing classes one half day each week from the 1st of October. It is hoped the proposed classes will be as successful as the citrus and deciduous packing classes.

Banana Rust—Inspector's Mistake.

At the monthly meeting of the Dagun Fruitgrowers' Association Messrs. Reynolds and Long Bros., casual inspectors, complained that another inspector, had confused thrip insect with other insects, and had mistaken red sunspots on the fruit for rust. As the mistake thus made was likely to cause the growers to lose confidence in them as inspectors, the inspector who had made the mistake (who was present) replied expressing keen regret at having been in error, and stated he would resign the position at once. Before the close of the meeting, which was a large representative gathering, a vote of confidence was passed to Messrs. Long Bros. and Reynolds as inspectors.

The Department should take more care when appointing inspectors, and examine them thoroughly on diseases generally.

Fruit Retailing on Railways.

The Railways Commission and the Committee for Direction for Fruit Marketing have eliminated the selling of fruit on the various railway platforms in Queensland. Complaints in the past were numerous, relative to the poor quality of the fruit being sold by the vendors. Fruit is now being sold en route, and only the best quality is stocked, and prices are reasonable, compared to those previously charged for inferior fruit.

Passengers can procure any kind or variety of fruit desired on the train, and the movement is a decided success, and well spoken of by Interstate travellers.

Palmwoods.

Cool Storage of Oranges.

At the monthly meeting of the Palmwoods Fruitgrowers' Association a paper was read by the secretary on the shipment of Oranges from Palestine to England. It was stated that the fruit was frozen, and kept six months. It was thought by members present, that something similar to this could be tried in Queensland, especially during the glut period. A good deal of discussion took place on the matter of cool storage, etc. It was resolved to write to the Department of Agriculture, asking the Fruit Marketing Instructor (Mr. W. Rowlands) to carry out cool storage experiments with Queensland Oranges the coming season.

[Memo.—This report was necessarily condensed, but further information is being sought. Taking the statement at face value, however, it is not commercially possible to keep frozen Oranges for six months. Queensland would do well to arrange for cold storage tests, on the lines adopted in the other States, notably Victoria.—Ed. "F.W."]

Banana Plants for New South Wales.

Mr. Gagger, Manager, Maroomba Plantations, Mullimbimby, N.S.W. visited several Banana districts during the month. He is purchasing 25,000 Banana suckers for present planting, and 100,000 to plant during November and December. This company is evidently not afraid of "bunchy top" disease.

Effective Fruit Fly Lure.

For some time past, negotiations have been proceeding between representatives of Mr. A. W. Harvey (discoverer of "Harvey's Fruit Fly Lure") and the Queensland Government, whereby the State should purchase the sole rights of the lure, Professor E. J. Goddard, who is in charge of the fly destruction campaign, has played a big part in these negotiations, the object of which is to enable the lure to be made available to fruitgrowers at a reasonable price.

The Government was not favourable to the payment of a royalty, but a further request asking the Government to subsidise the production of the lure over a number of years, has received favourable consideration. Some very remarkable results have been obtained from this lure, under Government supervision. The tests were carried out at Buderim Mt., Nudgee, and Stanthorpe.

Mr. A. W. Harvey states that he has been studying the fruit fly for 15 years, and he is confident the proposal of the Government will be the growers' salvation, and will prove an asset to Queensland, and put the fruit industry on a firm footing. Growers will be assured of sound fruit. Mr. Harvey intends to continue the study of the fruit fly until the scourge is practically a thing of the past. Having carried out thousands of experiments in this research, he has received an insight into what is the attraction of many other kinds of pests, and as time permits, will put his knowledge to account, and help in their extermination.

Prospects at Stanthorpe.

The coming fruit season at Stanthorpe promises to be one of the best on record. Plums, Peaches and early Apples are showing well. Good rains have been experienced everywhere, and orchardists generally have cultivated and worked their holdings much better than in previous years. It was common in the past to go through the district at this time of the year and find not a plough at work, but, thanks to the rain and good season, the horses and cultivators are kept busy.

Smyrna Fig Culture

A Sound Commercial Proposition in the Mid-Murray Areas.

Report of a Paper by Mr. C. G. Savage before the Australasian Association for the Advancement of Science.

THE CULTIVATION and drying of the Smyrna Fig in the Mid-Murray areas is one of, if not the best paying propositions for growers at the present time, stated Mr. C. G. Savage, South Australian Deputy Horticultural Instructor, at the recent conference in Adelaide of the Australasian Association for the Advancement of Science.

Continuing, Mr. Savage in his paper, said that the annual importation of dried figs into the Commonwealth was over 225 tons. The local production of dried Smyrna Figs was less than 10 tons. There was no reason why the whole of the dried Figs required for the Australasian market should not be produced locally; the present sales were capable of being greatly increased.

Fertilization by Wasp.

For successful cultivation of the **Smyrna Fig it was necessary that the** fruits be fertilised. In the case of the ordinary edible Fig this was not so, the latter fruit developing without fertilisation. The Capri or wild Fig produces the necessary pollen for fertilising the Smyrna fruits. The pollen is conveyed from the Capri to the Smyrna Figs by the agency of a small wasp, Blastophaga grossorum, which developed in the Capri fruit.

During the year there were three broods of the insect, one in September, the second in December, and the third in March. At the same periods crops of Figs were borne on Capri trees, thus the insect was carried throughout the year. These crops of Figs were known as the Spring or Profichi, the Summer or Mammoni, and the Autumn or Mamme crops respectively.

The Spring or Profichi crop, which reached maturity during early December, was the one used for fertilising the Smyrna Figs. The Mamme or Autumn crop carried the insects over the winter months.

The male Blastophaga is a small brownish insect, wingless and blind, and seldom leaves the Capri fruit. The female is winged, black in color, and slightly less than 1/8th inch in length. The insects develop in the modified female flowers towards the base of the Fig and when issuing from the fruit must of necessity pass through the mass of male flowers carried towards the eye of the Fig.

When the Profichi crop is matured, the male flowers produce a mass of pollen. The wasps are then fully grown. In passing through the male flowers the female wasps become covered in pollen grains.

The Capri Figs are gathered, placed in small baskets, and distributed through the Smyrna trees, the fruit of these trees then being about the size of marbles. The wasp forces her way into the small fruits through the oustiole or eye in search of suitable flowers in which to lay her eggs. The flowers of the Smyrna Figs being of different formation from those of the Capri, she is unable to oveposit. During the search amongst the female flowers the pollen grains adhering to the body of the wasp are brushed on to the stigmas and the fruit is fertilised.

Harvesting and Curing.

The Smyrna fruit matures from late February into May, and when fully ripe is of a large, roundish, flattened shape. This Fig does not ferment as readily as the ordinary varieties, and, if left, will wilt and partially dry on the tree. For drying purposes the fruit should never be picked before it has commenced to wilt and hangs limp on the stalk. Where possible it is advantageous to allow the fruit to fall to the ground before gathering, as the fruit has then developed the full sugar content, and the cost of harvesting is greatly reduced.

The fruit is gathered into perforated picking tins, then passed through boiling brine, placed on wooden trays and exposed to the sun to complete the drying process, which takes from four to six days. The Figs are then sweated for two or three weeks to even up the moisture content, after which they are graded for size. The fruit is then washed to remove any grit collected upon it during drying operations and is again exposed to the sun to evaporate the surplus water.

The Figs are now placed in a steam bath for ten to fifteen minutes. This process softens and fines down the skin and tends to destroy any insect eggs that may have been deposited upon them. While still warm the fruit is slightly flattened between the finger and thumb, and packed in small wooden frames. The bottom layer is placed with the stems down and the top layer with the stems uppermost. By this method of packing, the eye of the Fig, around which the toughest portion of the skin is found, is already towards the centre of the block of fruit where the more moisture is found. The fruit also presents a uniform appearance on both sides.

The Figs are pressed and then wrapped in a grease paper and packed into cartons or paper packets according to grade.

To Mr. T. B. Robson, of Hectorville, South Australia, the honor is due for establishing the Blastophaga in Australia.

The Department of Agriculture Experimental Orchard at Berri, River Murray, has called attention to, and demonstrated that, the dried Fig industry is capable of wide expansion along the Murray Valley.

MANURING VINES.

Experiments at Mildura.

In some quarters a standard dressing of 10 cwts. of artificial fertilisers per acre might be considered high, and uneconomical, yet Mr. E. A. Creaton, of Billabong, via Mildura, gave his vines; last season, an application of a complete fertiliser at the rate of 10 cwts. per acre. On certain portions of his lands, where vines showed an abnormally heavy growth, an extra bag of potash per acre was applied late in the year, so that certain areas received as high a dressing as 11 2-3rd cwt's per acre.

Mr. Creaton states that last year his vines carried up to 4¾ tons of fruit per acre, and despite this, they are carrying for next pruning, canes as good as those of last winter.

The complete manure used by Mr. Creaton last season included 1 bag (140 lbs.) of sulphate of ammonia, and while he cannot say definitely just what measure of benefit he obtained from the inclusion of the nitrogenous element, he is sufficiently convinced of its advantages, to again include it this year.

On a patch of ground which had previously failed to grow a respectable crop of green manure, one-third of a bag of sulphate of ammonia was used in addition to the ordinary application of bone and super, and it was here that the influence of the sulphate of ammonia was most marked. The green manure crop, tick beans and barley, treated with the ammonia, produced nearly double the growth that was obtained from the bone and super alone.

Mr. Creaton is a great believer in local experiments, and no doubt he finds that where straight out phosphoric acid fertilisers obtained results in the past, the modern grower is compelled to go further and include both nitrogenous and potassic elements in his fertiliser programme, if he is to remain in the business for something more than his health.

Swanbourne, W.A.,
July 14th, 1924.

As a regular subscriber to the "Fruit World," I appreciate the good work you are doing in connection with the fruitgrowing industry.

A. L.

Cold Storage In Australasia

FRUITGROWERS' COOL STORES ASSOCIATION.

Successful Annual Conference.

Bright Discussions and Educational Papers.

THE FRUITGROWERS' COOL STORES Association of Victoria held its annual conference at Frankston on September 2.

There were about 70 delegates present. The President, Mr. R. Mair, was in the chair.

The debates were followed with keen interest, and the educational papers read by the several experts were greatly enjoyed.

The annual report (published in last month's "Fruit World") showed that the membership consisted of the whole of the Co-operative Cool Stores and five private stores, with a storage capacity of about 700,000 cases.

Monthly Returns.

On the motion of Messrs. Cole and Stockton (Tyabb), it was decided that each store should furnish to the Association Secretary a monthly statement of the fruit in store. Such information, it was stated, would be of value in deciding what quantities should be marketed, and would prevent a collapse of the market which occurred at the close of the last season when all the stores "unloaded" at the same time.

Exchange of Balance Sheets.

It was decided that the various Cool Stores should make their balance-sheets available to each other.

Conference accepted the kind offer of Mr. Barrett (Ringwood) to dissect the balance-sheets and to issue a comprehensive comparative statement summarising the items.

Insurance Risks.

Mr. Barrett introduced this subject, giving valued information respecting the risks which it was desirable to cover.

Ship's Thermometers.

Mr. John Petty (Doncaster) moved that the Government be asked to arrange for long distance or self-registering thermometers to be installed on ships carrying fruit cargoes. This was seconded by Mr. Lang and carried.

Uniform Stacking.

Mr. Tompkins (Croydon) drew attention to the absence of uniformity in stacking the cases in the chambers. Some of the growers, he said, made provision for a current of air through the stacks by placing laths between each of the rows, and others packed the cases as closely together as possible, for the purpose of getting more of them into the allotted space. Action should be taken to ascertain which was the correct method, and the observance of whatever was decided upon ought to be made compulsory.

Engineers Welcomed.

Mr. P. T. Young, Ringwood, introduced the subject of linking up first engineers with the Association.

The idea was approved: in the discussion it was stated that engineers had always been welcome, and had often been appointed as delegates.

Institute of Science and Industry.

A paper, prepared by Sir George Knibbs, Director of the Institute of Science and Industry, was read by an officer of the Institute. The paper dealt with some of the scientific facts relating to cold storage, and pointed out that the Institute was hampered in its programme through lack of funds.

On the motion of Messrs. Lang and Barrett, it was resolved—

"That this Conference cordially appreciates the work of the Institute of Science and Industry, and requests the Federal Government to make available sufficient funds for the institute to adequately function in its work of scientific research."

Fruit Storage and Shipment.

Mr. J. Hepburn, Chief Engineer of the Government Cool Stores, in his paper pointed out that with fruit the best results were obtained when it was transferred to the cool store and the temperature reduced as soon as possible after severance from the tree. The more rapid the rate of cooling, without injury, the longer would be the life of the fruit after leaving the store. With regard to the transport of fruit overseas, the first essential was the proper equipment on the ships carrying the fruit, and recognition by the shipping companies of their responsibility to land the cargoes in sound condition. Practically, no consideration had been given to the equipment on board ships regarding its suitability for taking care of fruit cargoes. The cargoes that had arrived in good condition so far had been mostly a matter of good luck. He suggested that in shipping fruit the cases should be stowed in such a way that circulation of air was possible, that once the hatches were on the temperature should be reduced to a given degree within a fixed time; that when final loading was completed the temperature should again be reduced within a specified time and remain constant until the fruit was unloaded; that the humidity of the hold to be maintained at a given figure until after the final loading: the gas content of the hold to be maintained at a given ratio.

Cool Store at Mt. Waverley, Vic.
Capacity, 30,000 cases. Messrs. Lechte and Pepperell are standing near the car.

Trade with the East.

Mr. H. Louey Pang, in an address, urged that the Government regulations be altered to permit Chinese merchants greater freedom in coming to Australia to buy. That there was considerable trade possible between Australia and China was indicated by the following figures:—

The imports of confectionery into

China in 1922 were valued at £83,000, but Australian merchants supplied only £80 worth. It was the same with other commodities. Biscuits were valued at £36,000, of which Australia supplied £666 worth. Leather, £1,410,000; Australia, £15,000. Dried fruits, £208,000; Australia, £833. Fresh fruit, £118,500; Australia, £3,000; Flour, £583,000; Australia, £3,000.

A careful investigation of the fruit trade showed that three kinds of fruit were likely to meet with more ready sale. These were **Oranges, Apples and Grapes;** but more particularly Apples, which could not be grown there. Apples grown in Japan were mealy and unsuited to the trade, whilst the American Apples were usually too soft to meet with a good demand. If Australian Apples could be placed on the Chinese market during June, July, and August they would be assured of a ready sale at prices which would be remunerative to exporters.

With a population of 500,000,000 people unable to produce their food requirements, China offered very considerable opportunities for trade development. Portion of the money set aside by the Federal Ministry for the development of trade should be applied towards the exploitation of the eastern markets. Before subsidies were offered to shipping companies the trade should be fostered.

Messrs. Vear, Brown, Lang and Tully were appointed a committee to assist Mr. Pang in furthering trade between Victoria and China.

"Sleepiness" in Apples.

Internal breakdown or "sleepiness" in Apples was described by Mr. D. B. Adam, B.Agr.Sc., of the Department of Agriculture, as the most serious disease affecting the storage qualities of that fruit. During the 1923 season, which was a normal one with a dry autumn, losses of Jonathans from sleepiness were not complained of, while during this last season considerable autumn rains fell, and the losses from sleepiness had in some cases been heavy. Dealing with cold storage conditions, Mr. Adam stated that while the matter was by no means conclusively demonstrated, the evidence so far favored a storage temperature of 35 deg. Fahr. rather than 32 deg. To cope with this disease the orchardist must study orchard conditions closely, and by pruning and tree management in the notoriously "sleepy" orchards increase the number of individual Apples making demands on the sap supply, while at the same time maintaining the moisture content of the soil from year to year as uniform as possible.

Practical Experiences.

Mr. W. Lipscombe, of Croydon, read a paper based on his experiences, which is published in this issue.

Election of Officers.

The election of officers for the ensuing year resulted as follow:—President Mr. R. M. Finlay (Diamond Creek); Vice-President, Mr. J. Tully (Doncaster); Auditor, Mr. J. W. Barrett (Ringwood); Council member to the Chamber of Agriculture, Mr. J. H. Lang (Harcourt), Council member to the Central Fruitgrowers' Association, Mr. P. T. Young (Ringwood); Secretary and Treasurer, Mr. J. G. Aird (Ringwood).

Credit is due to the Secretary (Mr. J. G. Aird) for the capable manner in which arrangements were made and carried out.

Affiliated Stores.

At present the districts and individuals affiliated with the Association, and the storage space available at each place, are as follow:—Blackburn, 35,000 cases; East Burwood, 32,000; Diamond Creek, 15,000; Doncaster Central, 19,600; Doncaster East, 25,000; Doncaster West, 40,000; Doncaster Orchardists, 115,000; Harcourt, 80,000; Hastings, 20,000; Mount Waverley, 30,000; Red Hill, 22,500; Ringwood, 50,223; Templestowe, 20,000; Tyabb, 32,000; Wantirna, 40,000; Croydon, 20,000; Hurstbridge, 35,000; E. Lawford (Doncaster), 20,000; W. R. Jenkins (Templestowe), 5,000; J. W. Bailey (Narre Warren), 3,800; W. Lipscombe (Croydon, 10,000; and a recently erected store at Cobram.

COLD STORAGE OF APPLES AND PEARS.

Maturity: Temperatures: Air Circulation: Care in Handling.

Pears should be Stored in a Separate Chamber from Apples.

A Paper Read by Mr. W. Lipscombe at the Frankston Cold Storage Conference.

THE following remarks regarding the cool storage of fruit, are based on practical experience extending over a number of years. I may here state I have been able to more fully watch cause and effect since having a cool store on my orchard.

Our cool store is worked with the Direct Ammonia Expansion, which I prefer to the Cool Air System, as we get no withered fruit under the Direct Expansion; should the brine mixture be too strong there is great risk of the fruit being withered, especially fruit stacked near the intake ducts, but under the Direct Expansion the risk is eliminated.

Any extra expense in providing for a free circulation of cool air all round each case is money well spent.

Our store consists of four rooms, measuring 20 x 40, we use the kerosene cases for storing, so are able to store 2500 cases in each room with passage way of 2ft. We put 2 x 1inch battens on the floor to stack the cases on, and a lath between each case, the laths extending to two rows which binds them together. We leave one inch space between each case, thereby having a free circulation of air round each case.

By this method of having

free circulation of air

we know that the temperature of our fruit is the same as our rooms are kept at, that the cases of fruit are at that temperature, as even temperature is one of the main factors in cool storage, thus the necessity for free air circulation.

The plant in our store consists of 20h.p., Ronaldson Tippets Kero. Engine, with 6 ton Werner Compressor, rather a small plant to take care of ten thousand cases of fruit; it does the work alright, but we have to run an extra number of hours per day, viz., 17 hours when taking in the fruit, especially in bringing the temperature down quickly when storing Pears. I would recommend a 30h.p. engine, with 10 ton compressor; the work then would be comparatively easy.

Correct Storage Temperatures.

With reference to temperatures, I find from 30 to 33 degrees to be ideal, and, from experience, that **Pears** should be stored in a separate chamber, if Apples and Pears are being stored at the same time. The reason I make this assertion is, that the temperature of the Pear requires to be brought down as quickly as possible to prevent the fruit from maturing, as Pears mature much more quickly than Apples, and will not hold up for any length of time if ripeness has set in before they are brought down to 30 or 32.

Last year we packed a case of Pears of each variety to be stored, in three days we had all the fruit down to 31 deg. and then stacked the case with the other fruit leaving it in the store till we shut down in December, we then found every variety in the same condition as when picked, except Williams which was ripe but fit to eat. I am therefore convinced that the temperature of Pears must be brought down quickly and then an even temperature of 30 to 32 should be maintained. Pears then can be kept any reasonable time.

With regard to cool storing **Apples,** I find that they keep better, all things being equal, if the temperature is brought down gradually. I therefore, if possible, put them in a room by themselves (say at 45 degrees) and gradually reduce the temperature to 30 to 32. Where this is not possible I would recommend the cases of Apples being put in the shade for a day, and then put in the cool room early in the morning.

I notice when picking in the hot weather, the fruit is of a temperature of 80 to 90 degrees, and if fruit of

this high temperature is put in a room where fruit is down to 30 or 32 deg., the change is too sudden, and fruit, if not in the pink of maturity, is liable to suffer with scald or to break down; in addition, if any quantity of this overheated fruit is put with fruit at the standard temperature, it naturally sends the temperature of the room over the standard, and one of the main points of successful cool storage of fruit is an even temperature, no variation to exceed three degrees.

Now we come to the question of
maturity of fruit,
or what condition the fruit should be to pick. This is the most vital part of successful cool storage, and I notice that growers do not pay attention to the right maturity of fruit when picking for cool storage.

If fruit is picked too green it is more subject to scald, and if picked too ripe will break down in a very short time, therefore as all fruit on any tree is picked at one picking, you of course have some over matured and some under matured, so I find two to three pickings to be necessary to get the fruit at right maturity.

A very good guide to go by to know when the fruit is at right maturity is when the green colouring of the Apples is changing to yellow.

Apples off young trees will not keep so well as off old mature trees, so for long storage, fruit should be off trees which are 10 years of age and older.

I also notice fruit will not hold up for any length of time, if there is an over abundance of moisture through the growing season.

There is also a difference in the time different varieties of Apples will keep in cool store, therefore growers should be careful to get the short keeping varieties out first. Some of the early varieties of Apples will pay for holding a short period in cold store until the glut in the market is over.

Summary.

To summarise the whole of my experience in cool storing of fruit, the points are as follows:—

(1) Condition of maturity of fruit.
(2) Even temperature, with variation of not more than three degrees.
(3) Free circulation of air round each case.
(4) Careful handling of fruit before storing.

COOL STORE CONFERENCE.

The conference was brought to a conclusion on Wednesday, 3rd September, by an interesting trip round the Mornington Peninsula.

The cool stores at Somerville, Tyabb, and Hastings were visited, and the delegates were much impressed by the high quality of the fruit stored and the freedom from "scald" and "sleepiness." Some extra large highly coloured Jonathans at Tyabb were as sound as when they were picked from the tree.

The well kept state of the engine room and fittings at each store bore ample evidence of the pride the engineers took in their work. This was particularly noticeable at Hastings.

Lunch was provided at Hastings by the management of the three stores, and ample justice was done thereto. A vote of thanks to the various committees and ladies was proposed by Mr. J. H. Lang, and seconded by Mr. Williams, of the Retail Fruiterers' Association. The latter assured the growers that if they would bring fruit to market of equal quality to that seen at the different stores, they would have no difficulty in obtaining top price for it.

Once more on the move, this time to the Naval Base, where the delegates were received by Capt. Boyd. A very instructive two hours were spent here inspecting the various up-to-date implements of naval warfare—guns, mines, torpedoes, wireless, etc., and one could not but be impressed with the fact that the training being given was on the right lines, and that traditions of the Royal Navy being fully maintained.

COOL STORAGE IN TASMANIA.

The Huonville Store.

In 1918-9 a small company of growers was formed for the purpose of erecting a store at Huonville. In due course a store of four chambers was erected with a large packing shed, and capable of holding 26,000 cases. This has proved a great success. Five years later it was decided to add four more chambers to hold 30,000 cases, which improvement has just been completed—in fact, two of the rooms are in use. For the coming season there will be ample space for 56,000 cases.

The building is erected on the banks of the Huon River, the company also owning their own wharf. Growers have the privilege of putting in early Apples and Pears in February and March, or longer if desired, and can remove these on payment of a small handling fee, replacing by later varieties. The system is known as the "cold air," being admitted at floor level and drawn out at the ceiling.

The Directors (all fruitgrowers) are Messrs. J. G. Shield (Chairman), Sir Henry Jones (H. Jones & Co.), T. A. Francomb, F. Upchurch, A. Stuttington, A. G. Shield (Secretary).

We are born with faculties and powers capable of almost anything—such as at least would carry us further than can easily be imagined; but it is only the exercise of those powers which gives us ability and skill in anything, and leads us towards perfection.—John Locke.

SUNSHINE AND SUGAR.

The trade names of fruit, such as "Sunkist," "Sunmaid," and "Sunsweet," show the appreciation the grower, the marketing agencies and the buying public have of the relation between sunshine and quality of product. But how many have analysed the connection between them? What is the method of operation, the mechanism, by which the golden flood from the skies is transmuted into the delicious product of the tree and vine? writes Mr. E. L. Proebsting, Division of Pomology, University of California, U.S.A.

Here is one of the commonplace miracles of plant growth. Let us look at it a little more closely. First, what do we mean by the production of "quality"? The image the word brings to mind is of well formed, highly coloured, well flavoured, sweet and juicy fruit. What connection has sunshine with these characteristics?

A clue is given by looking at the source of food of the developing fruit. Like any other growing thing, it must be nourished, and the nourishment is provided by a complex mechanism embodied in the leaves. The leaves are able by means of this mechanism to manufacture many kinds of foodstuffs, such as sugars, oils, organic acids, proteins, etc. These are transported to the growing fruit where they are worked over in the laboratory of the living cells of the fruit.

The results of these transformations of material show in many ways. The walls about the cells are built up, giving firmness to the flesh. Within these walls are stored various products, depending on the sort of fruit. Some have a preponderance of starch, as the **Banana**; some sugar, as the **Grape** or the **Prune**; some oils, as the **Avocado**, and so on.

But the stored food, important as it is from a nutritional standpoint, is not all of the story. From some of them are built the pigments that paint the blush on the Apple's cheek and give the golden glow to the Orange.

There are the organic acids, the component of the juice which saves it from insipidity. Still another ingredient is the group which is largely responsible for the characteristic flavours and odours, which tickle our palate. These processes, which are the essentials going towards a ripe fruit are being accompanied by an increase in the concentration of sugars, which gives to the fruit much of the quality for which our fruit is noted. The presence of these materials is again responsible for the movement of water into the fruit. The result is a juice with the various soluble compounds present as a mixed solution that will rival the nectar of the gods.

Sunshine, then, makes fruit growing possible. Too little sunshine interferes with proper development.

Fruit Growing under Irrigation

Seasonable Cultural Notes.

(By Our Special Correspondent)

Cultivation.

WITH THE APPROACH of summer every effort should be put forward to bring the soil down into a fine tilth. The destruction of all undergrowth in the orchard and vineyard is essential for the best results to be won from the plantations.

In our irrigation areas the evaporation from the surface soil under the rays of the hot summer sun is intense; every precaution should be taken to reduce this loss of moisture to a minimum.

Where soil is left in a more or less rough, lumpy condition, a greater surface area is exposed to the drying atmosphere. When the surface of the land is hard and compact, or the irrigation furrows left uncultivated, the loss of moisture from the soil by capillary attraction and surface evaporation goes on rapidly.

Moisture may be conserved in a soil by forming what is often termed a "dust mulch," i.e., bringing the surface of the soil down into a fine state of sub-division. This practice reduces the loss of moisture by capillarity to a minimum.

Thorough cultivation also aerates the soil, and encourages active helpful bacterial agencies, in fixing nitrogen, and assisting in bringing dormant plant food into such a form that it may be assimilated by the plants.

Weeds, if left on the land after the warm weather sets in, draws heavily upon the moisture, thus rapidly drying out the soil. Weeds form harbors for insect pests, such as cutworms and Rutherglen flies. Dense masses of undergrowth also assist in forming conditions, especially in the lower lying areas, that are favorable to the rapid spread of fungus diseases.

* * *

Cincturing the Currant.

MUCH CONTROVERSY still goes on as to the best time and method to cincture Currants.

Young vines should not be cinctured unless they are growing strongly, and then it is advisable only to give the single cut around the circumference of the stem.

In all probability the removal of a strip of bark would give heavier returns, but the returns would not compensate for the weakening effect upon the vines and the reduced crops in subsequent years.

The single cut on old established vines is not recommended, nor is the double cut, i.e., two single cuts spaced about an inch apart. The removal of a narrow piece of bark, about ¼th inch wide, from around the whole of the circumference of the stem is found most satisfactory. The bark may be removed by

making two cuts

with the knife around the stem, and then taking away the strip of bark; with a double-bladed cincturing tool the strip of bark may be removed in one operation.

Before cincturing is commenced the rough bark should be removed from around the stem where the cincture is to be made. This practice simplifies the operation, and allows the operator to work much more rapidly.

After the cincturing the stem should be protected by covering the portion from which the bark has been removed, with a thin strip of waxed cloth. This protective measure is not commonly adopted, but those who follow it, find it advantageous, as the incisions soon callus over.

The time of cincturing

will be determined to a large degree by the area to be treated; the greater the area, the greater the necessity to commence cincturing early. Data is lacking as the best time to cincture, and whether the early or late operation influences the setting, ripening or quality of the fruit differently.

From general observations cincturing will prove satisfactory once the caps are being shed freely, and should be completed by the time the last of the caps have fallen. Some of the berries will have obtained the size of small shot at that period.

* * *

Diseases.

IN EARLY OCTOBER the first spraying for the control of codlin moth should be given. The first spraying is the most important, as every caterpillar that is not destroyed represents a danger of further infestation during the summer months.

Thoroughness should be the keynote of all spraying operations, careless applications are often a waste of time and material.

Growers are apt to blame the materials used for the poor results obtained, and do not take the personal aspect into consideration.

The time of application also has a big bearing upon the final results. The poison in the case of the codlin moth must be upon the plant before the caterpillar enters the fruit, otherwise it is of little avail. The codlin moth lays the first batch of eggs just as the petals are falling from the flowers, consequently the first spraying should be carried out about the time when the most of the petals have been shed.

Arsenate of lead is now used universally for the control of the moth, and should be applied at the rate of 3 lbs. of the paste or 1½ lbs. of the powder to each 50 gallons water.

The first application of **sulphur for oidium of the vine** should be given when the shoots are 6 to 9 inches long, just prior to the opening of the flowers. Subsequent sulphuring should be given according to the weather conditions.

Close, moist, sultry conditions are favourable to the rapid development of oidium, consequently when such conditions are experienced, sulphur should be applied to the vines.

For the control of **anthracnose** and also of **Downey Mildew**, early sprayings with bluestone mixtures are advisable; further applications being necessary according to weather conditions.

Both the Bordeaux and Burgundy Mixtures have proved successful in combating these diseases in the summer. The main precaution to be observed is to have the copper sprays on the plants before the disease enters the tissue of the young growth.

SOUTH AUSTRALIA.

Government Nursery at Cobdogla, River Murray.

The Government Nursery at Cobdogla, was established principally for the purpose of raising vines for planting Soldiers' Blocks in the Irrigation Areas, states the Secretary of the South Australian Irrigation Commission.

A certain amount of experimental work was commenced, but was not advanced to any extent, and the Commission is not continuing the Nursery after the present stocks are disposed of. The areas of the nursery blocks are 61½ acres, and 63½ acres respectively, but only portion of these areas has been utilised.

As the parting instructions were being given, the fresh young salesman picked up his bag and started on his initial trip. "Good luck to you," said his chief; "wire us important news."

The following day this message was received: "Reached here safely, good room with bath, feeling fine."

The manager wired back: "So glad, love and kisses, good-bye."

—"Forbes Magazine."

Western Australia.

Advisory Board has a Brush with Labor Minister.

Does the Board Represent the Industry?

AN ELECTRICAL ATMOSPHERE pervaded the office of the Minister for Agriculture (Mr. M. F. Troy), on September 9, during the visit of a deputation which included the chairman of the State Fruit Advisory Board (Mr. O. Sparks), but which primarily represented the Citrus Growers' Association, states the "West Australian."

Mr. Sparks, who was the opening speaker, submitted the proposal that the Minister should not in future receive deputations to discuss fruit matters which had not come before the advisory board which had been elected to organise the fruit industry.

The Minister: Don't you know that I have been elected to listen to representations dealing with every aspect of the industry? **Who elected you?**

Mr. Sparks outlined the Federal action in the industry which had resulted in the election of the board, and this drew from the Minister the remark: **"Do you suggest that I should be subordinate to a body elected by the Minister for Trade and Customs?"**

Mr. Sparks said that the board did not desire anything of the kind.

The Minister: You ask me not to meet any other people. Don't you think that that is an extraordinary request?

Mr. Sparks explained that that attitude had been taken up by the Federal Minister, who desired one authority to speak for the whole of the industry, and they merely suggested that he (the Minister) might adopt a similar attitude.

The Minister: **I will not take that attitude. It is just as well for us to understand each other.** I don't think you have a right to ask me to take up that attitude. These other people claim to represent certain aspects of the industry, and I have no right to refuse to listen to them.

Mr. Sparks: Don't you think you could refer them to us?

The Minister: Don't you think I should know every aspect, without being the puppet of someone else? I do not propose to abide by the advice of anyone unless I know that that advice is advice I can accept. I am going to know as much about the fruit industry as I can, because the Government proposes to introduce a Fruit Marketing Bill for the purpose of organising the industry on similar lines to that of Queensland. There is a demand for it, and before any legislation is introduced I want to know all about it.

Mr. Sparks: Don't you think that a body appointed by the growers themselves could give you that information?

The Minister: **Why do these other people come along if you are appointed by the growers?**

Mr. Sparks: That is what we want to know. If you are going to take up the attitude that the board is of no use to you in an advisory capacity, it seems to me that we shall have to consider whether it is advisable to continue the board.

The Minister: Until I know more about the industry and its organisation generally, I am prepared to hear all I can about it. I have very grave doubts about the wisdom of a man going to Melbourne and advocating certain things which might be entirely opposed to Government policy. If the organised fruit growers of Western Australia elect a council, and I am satisfied that that council is elected by the fruitgrowers, then I am prepared to meet them. I do not then want to meet all the deputations. But I confess that at present I do not know much about this particular aspect of the fruit industry, and I want to know about it. It must be understood that I am not going to allow resolutions passed in Melbourne, and which I think might be contrary to the opinion held in this State, and contrary to the opinion which I hold, to be accepted here.

Members of the deputation, including Mr. A. C. R. Loaring and Mr. J. N. Cox (Coolup) then urged the introduction of legislation to control the industry. It was stated that the apathy of growers in regard to efforts directed towards the control both of export and local trade had nullified all that had been done.

Proceeding, the Minister said that the Government proposed to introduce a Bill next session for the purpose of organising the whole industry on similar lines to that in Queensland. It was a question of Government policy, but the Government could not do everything in one year, and its legislative programme for the present session would probably be greater than it could get through. Besides, the Government desired to know all about the Queensland experience. He wanted to know the difficulties which had been experienced in practice in Queensland, because if he knew the results of the experiment there he might be able to prepare a better measure for this State. The Government would give them power to organise the industry on their own lines, but in the hope that the community would be protected and not exploited. But they would have to have patience. There were more difficulties associated with the fruit industry than many other industries. He would be pleased to receive a report from them on the Queensland Bill, which he intended to inquire into before framing legislation for this State.

INCREASING FRUIT CONSUMPTION.

Western Australian Railways Department is Rendering Good Service.

"Fruit for the Family."

That the Western Australian Department of Railways is doing good work in increasing fruit consumption for the betterment of the industry is not as widely known as it deserves to be.

At a recent meeting of the Australian Advisory Fruit Council an interstate delegate, whilst congratulating Victoria on the fine advertising work done by the Railway Department in that State, gave no credit to Railway Commissioners in the other States, which drew a reply from the Director of Agriculture for Western Australia (Mr. G. L. Sutton), who instanced the fine work accomplished by Colonel Pope, the Railway Commissioner for Western Australia.

Mr. Sutton writes:—

"Colonel Pope, the Railway Commissioner of this State, with the object of increasing the consumption of fruit, in February, 1923, went exhaustively into the whole question of providing cheaper fruit for the public as the result of reduced transport charges and direct trading between grower and consumer. The first step taken was to introduce the innovation of what is in effect a

travelling fruit shop

operating from siding to siding along different parts of the railway system. Under this arrangement trucks were loaded with fruit at fruitgrowing centres, and attached to goods trains travelling through the wheat belt. Facilities were provided at each stopping place en route, which enabled the two growers in attendance to offer the fruit in quantities to suit growers' requirements. The rate charged was a special one, and included the fares of the two attendants.

"Later, in conjunction with the Fruit Advisory Board, a scheme was formulated under which fruit could be sent from the grower to the consumer to any part of the State by passenger trains to avoid delay.

"The object was to bring the grower and consumer into direct touch with each other, and to increase the consumption of fruit by enabling the consumer to obtain it with a minimum of trouble and expense.

"The rate fixed for this service was a reduced one. For short distances half parcels rates were charged up to a maximum flat rate of 1/6 for a bushel case of 56 lb. This amount was the total transport charge for the carriage of one case of fruit from any point to any other point on the Government railway system. For instance, a consignor at, say, Mt. Barker, could send a case of fruit to Meekatharra, almost 1,000 miles, for 1/6.

"Under the travelling fruit truck scheme

10,000 cases of mixed fruit—

Grapes, Apples, Pears and Oranges—were carried by the railways during the 1923 season, and up to date this season (1st June, 1924) the number has already reached 19,000 cases, or nearly 100 per cent. increase. This fact alone indicates a very real public appreciation of the benefits accruing from the Commissioner's efforts.

"Further, for the benefit of those people who are served by shipping, arrangements were made with the State Steamship Service under which consignments were delivered at any of the North-West ports, and along the Marble Bar railway, at a rate of 5/- per case, which covered railage, handling, wharfage and steamship charges.

"Upon the Commissioner falls the responsibility of receiving and delivering the consignment. All the consumer has to do is to notify the grower of his requirements.

"Similarly, the State Steamship Service carries fruit for the Commissioner to the southerly ports of Hopetoun, Ravensthorpe, and Esperance, the charge in this instance being 4/- per case.

"Putting the whole matter briefly, a person residing in any portion of the State who wants 'fruit for the family' has merely to write to a fruitgrower in any other portion of the State, and the Commissioner of Railways will do all the rest. Large striking posters bearing the slogan, **'Fruit for the Family,'** setting out the foregoing facts, together with smaller ones giving the names of the growers or sellers, have been printed by the Commissioner, circulated throughout the State, and placed in conspicuous positions on all railway buildings free of cost. It is probable that this slogan, 'Fruit for the Family,' is quite as familiar to residents of Western Australia as 'Eat More Fruit' is to the people of Victoria."

IMPROVING FRUIT EXPORT.

Will Corrugated Steel Dunnage Replace Battens in Ships' Holds?

The cumbersome method of placing wooden laths or battens between tiers of cases of fruit in ships' holds is all too well known, also the attendant disadvantages in blocking the free passage of air.

The new method is the use of Fisher's Patent Metal dunnage, which consists of a piece of bent corrugated steel inserted between the cases, thus separating each case from its fellow by a three-eighths inch space, providing a free circulation of air around each case.

Mr. W. Lvall Willis, of the firm of Lvall Willis & Co. Ltd., Billiter House, Billiter street, London E.C.3, England, is now in Australia, and hopes to complete arrangements whereby the new and improved method of stowage in ships' holds will be universally adopted.

Answers to Correspondents

Soil Treatment for Vineyard.—A subscriber at Beverford, near Swan Hill (Vic.) writes as follows:—

"I have a vineyard which was planted last October with Sultana rooted young plants. It was necessary to do a lot of grading on the block before I planted, and in patches, from 12 to 15 inches of the surface soil had to be taken (or graded) off, leaving, in my opinion, the new surface very sour. This district is called 'Murray Flats.' The soil is a grey color, with a clay subsoil. The surface soil I presume, is from 9 to 12 inches deep.

"I should like to know the best remedy to sweeten the sour patches of land where the young vines were sown, and which have not made the growth which vines did on the sweet soil. I should imagine the vines on the sour patches would never do or bear as well as those on the sweet land, so I should like to know what is absolutely the best and cheapest remedy, and what effect it will make, giving me full particulars. (I ploughed barley under this season)."

Answer. — The Victorian Government Viticulturist, Mr. F. de Castella, writes as follows.

Without seeing the land, it is difficult to advise the best course. If the soil is really sour, i.e., acid, a heavy dressing of lime would correct it. Near Swan Hill, however, the soils are usually plentifully supplied with lime, in which case they could not be acid. I am inclined to think that the exposed sub-soil is a stiff clay, poor in plant food other than potash. In this case the best way to mellow up these unsatisfactory patches would be by heavy broadcast dressings of Gypsum—say, two or three tons per acre, followed by deep ploughing—8 to 10 inches. The growth of the vines should be stimulated by heavy manuring; 4 cwt. superphosphate and 1½ cwt. of sulphate of ammonia per acre.

Green manuring will also help materially. It will, if repeated for a few years, supply the humus, which is almost entirely absent in the deeper layers. This lack of humus is perhaps the chief cause of the poor fertility of the patches denuded by grading, where the surface is really exposed sub-soil. These are very troublesome to deal with. Though improvement can be effected by the above treatment, it must take time—two years or more. It is doubtful if the growth will ever equal that of the vines on the built-up portions.

Sub-soiling a strip between the vine rows, 6 or 7 feet wide, to a depth of 18 inches, is also strongly to be recommended. As a good many roots will be cut, it is advisable to sub-soil every second row for a start, the alternate row being sub-soiled a year later. This work should be done in winter time, and whilst the vine roots are dormant. It is now too late to execute it this year.

Answer (by C. G. Savage, Deputy Horticultural Instructor, Government Experimental Farm, Berri, S.A.):—

I would advise working the patches of soil from which the top soil has been removed in the grading operations as deeply as possible. Subsoiling would be advantageous as the soil wants aerating to sweeten it. Liberal applications of lime or gypsum—say at the rate of 30 cwts. per acre, or 3 cubic yds. in the case of gypsum. Lime and gypsum tend to flocculate the clay, thus improving its mechanical condition. Lime would also tend to correct any acidity in the soil. The ploughing in of stable manure and green cover crops would materially improve both the fertility and mechanical condition of the land. These patches, under this treatment, will gradually correct themselves. Constant summer cultivation, both hand and team work, is advisable.

Dusting Grape Vines with Sulphur.—A grower from Glen Aplin (Q'ld.) writes as follow:—

"I am anxious to find out what is the easiest and most effective way of dusting Grape vines with dry sulphur. I have about six acres fully bearing, and thought you could inform me of the way growers in the southern States perform the sulphuring. Can you recommend a machine for this purpose, either horse power or hand power?

It is usual for us to have to sulphur about six times, and as we are then engaged picking other fruits, we find dusting with a bag too slow."

Answer (by C. G. Savage, Berri, S.A.):—

There are two types of sulphuring machines upon the local market—the bellows, and the Knapsack sulphur machine. The sulphur bellows act very well on a small scale, the disadvantage in a large vineyard being that the small amount of sulphur that the machine will carry results in much loss of time in re-filling. The Knapsack machine is strapped to the shoulders of the operator, and holds a fair amount of sulphur, being fairly economical in distributing the powder.

In Canada and U.S.A., power dusting machines are used for distributing "dust sprays" through the orchards and vineyards. Lime-sulphur compound can be substituted for the dry sulphur, and can be applied with the ordinary hand or power spray plants. Lime-sulphur should be used at the rate of 1 lb. of the commercial compound to 80-100 gallons of water.

Answer (by F. de Castella, Victorian Government Viticulturist):—

Until comparatively recently, sulphuring has usually been carried out by our vinegrowers with the sulphur bellows—obtainable from any seedsman or purveyor of garden requisites—which is much more efficient and less wasteful of sulphur than the hessian bag. The bellows has of recent years been displaced by the mechanical sulphurer or duster, of which several makes are obtainable in Melbourne, some operated by hand, and others by traction. The hand machines, known as Knapsack Sulphurers, are on the principle of Vermorel's, well known, "Torpille" sulphurer, which is still one of the best makes. The traction machines are somewhat similar, but on a larger scale. The air blast is developed by a fan; two rows of vines are treated simultaneously.

Very good French machines, both hand and traction, are obtainable from Mr. B. W. Bagenal, 47 Queen-street, Melbourne. American machines of similar type are stocked by D. & W. Chandler Ltd., Johnson-street, Fitzroy. Messrs. Buzacott & Co., of Sydney, also stock these machines.

Spraying and Manuring Citrus and Peach Trees.—A reader at Shepparton (Vic.) asks for information regarding—(1) the spraying of citrus trees and Peach trees with oil, and (2) the manuring of citrus and Peach trees:—

Answer (by F. W. Jefferson, Kyabram, V.):—

Spray citrus at the beginning of February (about the 7th) if trees are growing well, with the following mixture:—1 gallon red oil, 1 pint "Black Leaf 40," 2 lbs. hard soap, to 80 gallons water. This will clean up Red Scale, Oleander and Mussel Scale.

In reference to spraying Pullar's and Jefferson's Sport Clings, the same mixture at full pinking (Sept. 1st) for San Jose, Black and Green Aphis. It is also very beneficial for the setting of the fruit.

Manuring of Citrus.—In August-September, apply 4 cwt. of superphosphate to the acre, and hoe in. Top dress with 2½ cwt. to the acre. Repeat in February-March.

Manures for Pullar's Cling and Sports:—

September 1st.—5 cwt. market garden manure, No. 1, complete, per acre.

End of October.—2 cwt. nitrate of soda per acre.

January 1st.—6 cwt. blood manure per acre.

All manures except nitrate of soda must be worked in.

The above have been tested beyond question as manures for quality of fruit and vigour for bearing trees.

Deep, early ploughing in the spring is invaluable.

BUNCHY TOP IN BANANAS.

Urgent Need for Remedial Measures.

A correspondent at Brunswick River, N.S.W., writes thus:—

It does seem strange that the Bunchy Top disease of Bananas, which has practically wiped out two-thirds of the Banana industry on the Tweed, and has been in existence for over a decade should have brought forth no official literature for the guidance of its victims, although two States are affected by its ravages, and Fiji had experienced serious loss by its depredations as far back as thirty years ago.

Consequently, the pitiful fact remains that many entirely dependent on the industry for their livelihood, view their plants fruitless and withering towards decay before they could resort to remedial measures, or had become alive to the necessity to take such action. Worse still, when the official mind had been awakened, and was urged again and again by the local expert to introduce legislation to compel (as in the case of phylloxera many years before), the destruction of all diseased plants, the authorities took no action, and to-day dozens of deserted plantations are to be seen a mass of bunchy plants, circulating their spores throughout the land. For it is agreed by all the scientists who have investigated bunchy that whether it be a fungus trouble or no, it is spread by these spores on the air.

It was only when the N.S.W. and Federal Governments awakened to the fact that "bunchy" was making serious inroads into their income tax returns, that the present means of coping with the disease, and discovering a cure were undertaken.

If these steps result in ascertaining either cause or cure is a matter of doubt, as Professor Goddard, who heads operations, confesses to being faced by a very complex problem; but unless his remarks in his opening address at Murwillumbah have been misunderstood, Banana growers cannot expect any definite result from his researches for a couple of seasons. Meanwhile, the only sop of protection offered existing growers is to cut out all suspicious plants when discovered, and burn them.

QUEENSLAND MARKET FOR ORANGES.

The Editor, "Fruit World."

Sir,—In the September issue of "Fruit World," Mr. B. Krone, of the Victorian Department of Agriculture, mentions that the Orange season in Queensland will be over by the end of September, and advising southern citrus growers to try the Brisbane market.

Mr. Krone has been misinformed as to our season. As you know, Mr. Editor, there are two principal Orange growing districts in Queensland, viz., the Maryborough district, which includes the Burrum and Howard, and the Blackall Range district, which, for citrus growing, reaches from the falls at Mapleton to Flaxton and Montville, roughly about ten miles in length.

The season for the Maryborough district is much earlier than the Blackall Range, and as a rule the bulk of the crop is finished before the Blackall Range fruit is commenced.

At the time of Mr. Krone's visit to the Blackall Range, the growers had not nearly finished marketing the early Oranges, and had not commenced picking Valencia Lates. I think that about the first lot of Valencia Lates left here about the 5th of September, and then only quite a few, where the grower had a big crop, and felt it not safe to delay too long. Our Valencia Lates could be kept easily until Christmas, only it would not be safe, as the fruit fly might make its appearance. The marketing of Valencias will not be finished before the end of October, and it will perhaps go into November. I have sent them away in the middle of November.—Yours, etc.,

J. R. MORRIS.

Mapleton, via Nambour, Q.

14/9/24.

Re-working Peach Trees.—A reader at Batlow, N.S.W., asks for the opinion of some experienced "Fruit World" readers as to a good Cling Peach to work over on to "Red Italian Free," which he is cutting out this season, owing mainly to their clashing with "Goodman's Choice"; though otherwise he does not find them so profitable to handle as the Clings. The varieties already growing are as follows:—(1) Elberta (3 acres); (2) Goodman's Choice (5 acres); (3) Red Italian Free (3 acres), to be cut out; (4) Thiele's Cling (2 acres); (5) Nicholls' Orange Cling (1 acre).

Answer (by W. J. Allen, Department of Agriculture, Sydney):—Either Phillips' or Levis Cling may be recommended, either of which may be obtained from the Irrigation Commission's Nursery at Griffith.

Answer (by G. W. Peart, proprietor Goodman's Nurseries, Bairnsdale, V.):—I would advise that the Red Italian Free be worked over to any one of the following varieties:—Phillips, Golden Queen, Selma.

Capels Crossing, (Vic.), 11th Aug., 1924.

I enjoy your paper very much and get many useful hints from it. Wishing you every success, A. W. T.

Apple and Pear Grading Regulations

The Present Commonwealth Standards are Unsatisfactory.

N.S.W. Votes Unanimously for the American Grades.

THAT the Commonwealth grading regulations for Apples and Pears are unsuitable, is definitely asserted in N.S.W.

Mr. A. E. Herring, of Batlow, President of the Apple and Pear Growers' Association of New South Wales, sets out the position thus:—

At the Annual Conference of the Fruitgrowers' Association of New South Wales held in June last, it was unanimously resolved to urge that the Commonwealth Export Grading Regulations for Apples and Pears be re-drafted on American lines, and to further urge that grading regulations on these lines be adopted for the domestic marketing of Apples and Pears.

The New South Wales growers have every reason to believe that their unanimous wish in this latter regard will be translated into the necessary regulations for the coming season by our energetic and sympathetic Minister for Agriculture, the Hon. F. A. Chaffey, and that the States trading largely with Sydney will probably follow suit.

Briefly the requirements of any grading regulations are—

(1) That an inspector can tell definitely and quickly whether a consignment is graded as marked.

(2) That the grading regulations are of such a character that inspection at any port of shipment by inspectors who have never been in personal touch would yield uniform results.

(3) That each grade should contain fruit of only one quality, allowing, of course, as is done in America, a 10 per cent. margin for oversight or human error.

(4) That the regulations are of such a character that they lend themselves to quick and efficient shed grading of the entire crop.

The present Commonwealth grading regulations comply with none of these essential features, the Californian regulations comply with all of them. The Californian regulations, which are selected for the purposes of this article as being typical of American grading, are simple and practicable, the Commonwealth regulations are ridiculous and obviously unworkable, and it is safe to say that if the present Commonwealth regulations had been rigidly enforced, most of the fruit submitted for inspection would have been prohibited export this season.

In making a comparison of the Commonwealth and American grades it may be stated that there is no grade in any of the American States that can be compared with the fantastic Commonwealth special or first grade, which insists that all the fruit must be absolutely unblemished with the exception of slight russeting, slight hail mark and slight limb rubs to the combined extent of 5 per cent., one Apple showing slight healed over grub mark, one Apple showing a trace of black spot, or one Apple showing the slightest visible bitter pit would condemn the package; if the regulations are to be enforced no commercial grower or packing shed could attempt to put up this grade, as there must be a margin for oversight or human error of all blemishes in any grade before it becomes commercially possible to pack that grade.

The Californian extra fancy or first grade corresponds exactly with Commonwealth standard or second grade, that is to say, 90 per cent. of the fruit must be absolutely unblemished, 10 per cent. of combined blemishes are allowed, but only 5 per cent. of any one sort of blemish.

The Californian fancy or second grade allows 100 per cent. of slight blemishes on all fruit, that is to say, slight limb rubs, or slight black spot that do not in the aggregate on any one Apple exceed ¼ inch in diameter, slight visible bitter pit, slight hail mark, slight russeting, etc., etc., are allowed in this grade, and in addition, 10 per cent. of combined blemishes in excess of these slight blemishes is allowed for oversight or human error, but only 5 per cent. in excess of any one blemish; for example, only 5 per cent. of black spot exceeding ¼ inch in diameter is permitted: The Commonwealth regulations have no grade corresponding with the American fancy or second grade, which absorbs over 50 per cent. of the American pack running into over 100,000,000 bushels.

The Commonwealth plain or third grade insists that 70 per cent. of the fruit must be absolutely unblemished, and 30 per cent. may carry slight blemishes; in any sane grading regulations all unblemished fruit should be in first grade, and this so-called Commonwealth plain grade is not a grade but a blend, and it is a blend that would not be commercially possible to achieve, and it would be just as impossible to inspect and definitely pass or reject it; it would merely leave the inspectors guessing, and naturally they would all guess differently, so that what would pass for export at one port would be rejected at another and vice versa, thus defeating the whole aim and object of grading regulations, which is standardisation.

The Californian choice, or third grade, as in the fancy or second grade, allows 100 per cent. of blemishes, but the blemishes are more pronounced; black spot or limb rub, etc., that in the aggregate on any one Apple or Pear does not exceed a diameter of ½ inch, is permitted in this grade, and other blemishes to the same extent, and as in all other American grades 10 per cent. in excess of the limitations of areas of blemishes is allowed for oversight or human error.

The aim of the New South Wales growers in insisting on these grading regulations is to standardise the pack marketed in the State, and thus give growers and distributors an opportunity that does not exist at present of stabilising prices, and also of protecting the buyers and securing their confidence: the present haphazard method frequently means that the country retailer pays top market rates for second or third quality fruit, and naturally this rate has to be passed on to the consumer, with the inevitable shrinkage in consumption.

Every progressive grower realises that an endeavour must be made to put the industry on a safer commercial footing, and standardisation is the only foundation that can lend support and success to the undertaking.

TOUR OF CENTRAL AUSTRALIA.

Lord Stradbroke Praises Ford Cars.

Mr. G. V. Cornwell, General Manager, Tarrant Motors Pty. Ltd., received from Lord Stradbroke the following telegram from Gladstone, Queensland, on September 12:—

"Greatly enjoyed our motor tour just completed. Ford cars fulfilled all our expectations splendidly."

(Sgd.) STRADBROKE.

Lord and Lady Stradbroke have just completed a transcontinental tour through the centre of Australia from Adelaide to Darwin, and thence back to Longreach. Four Ford motor cars were used by the Vice-Regal party throughout the whole of the tour, without any mishaps.

The man who can't make a mistake can't make anything.—Abraham Lincoln.

Victoria.

ORCHARD REGISTRATION PROPOSALS.

Big Opposition is Developing.

The Scheme Examined.

WHILST growers in the several branches of the fruit industry in Victoria are seeking means for better organisation, it seems that the "orchard registration" proposals have received a severe setback.

At the Conference of delegates of the Victorian Fruitgrowers' Central Association held in August, no budget was presented detailing the estimated revenue and the allocation of same. Some delegates were in favor of a central organisation sufficiently well financed so that a capable secretary could be employed, such officer also to be secretary of some of the sectional organisations. Others favored handing the greater part, if not all of the money back to the "section" or "zone" from which the income was derived. One delegate thought sufficient money could be raised to send a representative to England to report on export conditions.

The draft proposals for orchard registration submitted to the meeting were whittled down till only the shell of the scheme was left. Even on that there was not unanimity.

Two cardinal points were stressed, viz, (1) the administration must be free of Government control; (2) the money raised must not be used for trading.

During the conference, several delegates complained that they were not given the opportunity of bringing forward amendments which had been decided upon in local meetings.

Just as the meeting was breaking up, a resolution was put and declared carried which brought immediate protest in the meeting, and still greater protest once the meeting was disbanded, viz., that the approach to the Government on the subject should be through the State Fruit Advisory Board.

That the Central Association should thus sink its individuality was regretted.

Also, the opinion was expressed that a mistake had been made in not calling a public meeting of growers, as several growers Associations were not represented, and it was known that other (affiliated) Associations were opposed to the scheme. Further, it was understood that vignerons were to be included under the scheme, though they had not been invited to express their views.

At the Advisory Board meeting next day, the President, Mr. Bailey, put the matter forward on behalf of the growers' conference. Mr. Cook, of the Citrus Association, who had been present at the growers' conference, took a widely different view, and finally, at the suggestion of the Assistant Minister, Mr. Cain, agreed to submit a revised scheme to the Minister.

* * *

When the "orchard tax" (as it was then called) was first mooted some years ago, the main idea seemed to be to collect funds from all fruit producers to create a strong central organisation, viz., the Victorian Fruitgrowers' Federation Ltd., paying a capable secretary and the expenses of the Executive, and for the new and strengthened Association to work as far as possible through sectional committees representing the several branches concerned.

This idea was largely departed from in the latest discussions, as the sectional interests were deemed paramount.

Although at the conference the growers glossed over the words "section or zone," it will be seen, on critical examination, that the scheme, as adopted, is mutually destructive. For instance, a grower in the metropolitan "zone," may desire to be included in that area; yet because he produces citrus—and large quantities of Lemons and Oranges are grown near Melbourne—the citrus portion of his orchard would contribute to the Citrus Association, with which he is not in touch, and does not desire to be, seeing that he sells his fruit direct to retailers in the Victoria Market. Other instances could be quoted.

* * *

Now, as regards the counter proposals by the Secretary of the Victorian Central Citrus Association. Is it proposed that these will be referred to the growers before being sent to the Minister? This would seem to be the wise course, as any legislation which lacks the support of the industry is foredoomed to failure.

The announcement of the terms of Mr. Cook's scheme has already brought forward strong opposition. In some districts petitions have been signed and forwarded both to the Minister for Agriculture (Mr. Hogan) and the Attorney-General (Mr. Slater). Doubtless the latter, who is a dried fruit producer, will wonder why he, and his district, were not consulted.

The counter scheme submitted by the Secretary of the Victorian Central Citrus Association includes, inter alia:—

> Growers to be compelled, under penalty to obtain a Registration Form, fill in the details under declaration (as in the income tax schedules) and return same to the appointed Government authority).
>
> Such Government authority to assess the Registration fee at 1/- per acre on the total acreage, and require it to be paid by a certain date (as in the case of the income tax with penalty for non-payment).
>
> Such Registration Forms to be analysed by the Government authority and the areas under each class of fruit, such as citrus, dried fruits, Apples, Pears, soft fruits, berries, etc., to be tabulated and a record made of the total area under each variety.
>
> A Departmental Board to consist of the Director of Agriculture, the Citriculturist, Chief Fruit Inspector, and other Government officers to be appointed to investigate the constitutions, rules and general bona fides of sectional organisations purporting to represent the growers of each class, such as citrus growers, berry growers, dried fruit, etc., and to certify approved organisations under the Act.
>
> Such Board to have regard to the objects of such sectional organisations rather than the actual numbers of growers they represent.
>
> All money received as Registration Fees to be granted to the approved sectional organisations in the proportion of the acreage planted with the particular class of fruit represented by the organisation, i.e., if citrus trees consist of 10 per cent. of the total acreage planted, the Citrus Growers' Association receive 10 per cent. of the registration fees, and so on.
>
> Such approved organisations to be permitted to expend the money so raised in the manner they consider best calculated to further the interests of the section they represent, provided that their Constitutions preserve an open door for unattached growers in the section to become full members.

* * *

This new scheme departs vitally from the expressed desires of such growers as are in favor of Orchard Registration (1) in the inclusion of Grape growers (producers of dried fruits and wine Grapes);

(2) in the authority proposed to be vested in the Departmental Board;

(3) in the definition of sectional interests, as opposed to the idea of "zones" or districts;

(4) in the manner of spending the money, i.e., instead of using it "in the manner best calculated to further the interest of the section," the expenditure should be defined on certain lines of definite policy.

* * *

As the matter stands, the Orchard Registration proposals are unpalatable. The Assistant Minister, Mr. Cain, suggested that growers would need to convince their Parliamentary representatives of their desires in this matter.

A prior step seems to be necessary, viz., to convince the growers first.

Compulsory Orchard Registration.—At a meeting of the Executive of the Metropolitan and District Fruitgrowers' Association, the draft proposals outlined by Mr. B. S. B. Cook, of the Citrus Association, were considered in detail. It was decided to enter a vigorous protest against their adoption, and to inform the Minister for Agriculture, their local member, and the press of this decision.

Commercial Items.

The Harcourt Pipe Company Pty. Ltd. was registered on September 4 with a nominal capital of £2,000, the objects of the company being to acquire the rights of Charles Henry Seelenmeyer, Harcourt, relating to the business of manufacturer and dealer in concrete goods. The directors of the new company are C. H. Seelenmeyer and Burnard Wesley Moray.

FRUIT FOR CANNING.

Bounty Desired for 1925 Crop.

EARNEST representations are being made by growers to secure a bounty on production and export for the 1924-5 crop of canning fruits. This applies particularly to Peaches, Pears, Apricots, Pineapples and Berry fruits.

Over 95 per cent. of the Peaches for canning are produced in northern Victoria and in the Murrumbidgee Irrigation Area of New South Wales. A conference between representatives of these centres was recently held at Tocumwal, N.S.W., Mr. W. J. Foster presiding. After a most searching survey on audited figures regarding the cost of production, it was demonstrated to the satisfaction of all concerned that the cost of production for Peaches, Apricots and Pears was not under £12 per ton.

Victorian Fruit Exhibit at the recent Brisbane Show.
A Creditable Display.

NEW ZEALAND ORCHARD TAX.

The amount of cash being received through the orchard tax is showing a considerable reduction from year to year—last year was a little short of £1,900, states the "New Zealand Fruitgrower." This is accounted for partly by the increase in the cost of collection, which is shown in the last balance-sheet at over £600. This sum, it is explained, includes some amounts which should have been shown against the previous year's orchard tax. Another reason given for the shrinkage in the total is the number of defaulters. This is a serious matter if the defaulters are increasing in number to such an extent as to diminish the year's returns by a substantial amount. The Horticulture Division is instituting proceedings for the recovery of the amounts due from all orchard tax defaulters.

Growers accepting less than this were drawing on their capital, and would soon be forced out of business. Last season, Victorians received £10 per ton for Cling Peaches for canning, whilst Murrumbidgee growers received £9.

Last canning season there was a divergence of views between the co-operative and the proprietary canners. This year it is understood that for the most effective control of the local and export trade, a satisfactory working arrangement has been arrived at to protect the interests of the growers, canners and the general public. It is in this spirit that the Federal Government is being approached to earmark for the fruit canning industry portion of the £500,000 mentioned by the Treasurer in his budget speech as being set aside for such purposes.

It is likely that further conferences will be held between the Goulburn Valley and Murrumbidgee growers. A happy thought has been suggested, viz., that where such conferences are necessary, the Murrumbidgee growers will visit the Goulburn Valley, and that similarly, the Goulburn Valley growers will return the compliment and hold a further conference at Leeton or Griffith. It is felt that by so doing there would be a more complete agreement on matters of mutual interest regarding prices and conditions, and further, that the growers would more readily grasp each other's problems and seek unitedly to solve them.

Generally speaking, there is a much more hopeful tone amongst the growers and in the canning trade, which augurs well for the future. Difficulties which confronted the industry are being overcome.

It is, however, the sincere conviction of those closely in touch with the details that a bounty on production and export is essential as regards the coming season's crops.

SOUTH AUSTRALIAN DOINGS.

Bounty Desired and Pool for Jam Fruits.

Orchard Registration Favored.

Mr. J. Donaldson, of Paradise, S. Australia, writes:—"The prospects are that we shall have in South Australia a heavy crop of fruit all round, which means that unless we adopt some method of handling it we will get very little for it. Our new Government has expressed itself in favor of helping the fruitgrowers, and the Executive of our Association has appointed a Board (to be registered) to take control of the fruit. The Premier has given us his support towards financing a jam fruit pool.

"Of course we are looking to the Federal Government for something of a bounty similar to last year, on canned goods.

"We are asking for £15,000 towards a first payment in a pool, and the processing costs to our Co-operative Society, which is to handle the whole of the crop for us outside the fruit required by the other factories to whom the fruit will be sold at a minimum price to be fixed when the crop is assured. This will save any fruit from being sacrificed on the market, and each one will have to pay the same. The Board, under supervision from the Government, will have control of sales of pulp, etc., and the accounts will be kept by the co-operative factory.

"Could not something similar be done in Victoria and N.S.W. to handle the fruit, thus saving this "1/- per case" business, which hits very hard?

"Our Executive has also agreed to the drafting of a request to the Government for a Bill to legalise collection of an orchard registration fee, the funds from same to be used to finance pools, etc., for the profitable handling of our fruit, the details of which have yet to be drawn up."

TASMANIA.

News and Notes.

(By Our Special Correspondent.)

WEATHER CONDITIONS continue good. Cultivation is proceeding in all centres, and the early fungicidal and insecticidal sprays have been applied in most cases under satisfactory conditions.

Although it is too early to venture an opinion as to the probable crop, there is promise of a heavy blossoming in all varieties of fruits.

Apricots have set well in most districts, although the danger period is not yet passed.

Pears, particularly Williams and Keiffer, should produce heavy crops, whilst Plums and Prunes are setting satisfactorily. The period of good weather enjoyed at the end of last month enabled the majority of orchardists to carry out spring ploughing efficiently, and the areas generally are in good order for the coming season.

Reservation of Timber Areas.

The movement in the Huon Districts to induce the Government to reserve certain timber areas for future case material requirements is being strongly supported by all sections of the industry. A selection has been made of suitable areas, amongst which the Arve River valley is considered to be the most favourably situated. A request has been forwarded to the State Government to make this a reservation under the scheme outlined, so as to safeguard a supply of containers for export in future years.

Fruit Fly.

Owing to the prevalence of fruit fly maggots amongst citrus imports from some of the mainland States, and the risk of introduction of the pest into Tasmania by this means, the Department of Agriculture has made experiments toward a safer method of treatment and inspection than that as present constituted in quarantining and sorting over.

Reports having been received from the mainland of the success of the cold storage treatment of infested fruit for seven days at 34 degrees F., the State Fruit Expert (Mr. P. H. Thomas), arranged for a test on similar lines to be conducted in Tasmania. Fruits were selected which were known to contain maggots, and these, together with a proportion of clean Mandarins, Shaddocks, and Oranges were held in cold store over a period of seven days at 34 degrees F. Inspection was made of each fruit, when this was completed, and it was found that 70 per cent. of the larvae were killed, but that the remainder had survived the test.

As it is proposed to utilise this method in the treatment of fruit imported from infested States before allowing it to be placed on the market, the results were somewhat disappointing. Further experiments are to be carried out at a temperature of 33 deg. F. The sound Oranges and Mandarins were not affected in quality in any way by the cold storage.

Electric Power in Huon Districts.

The power generated from the State Hydro Electric scheme at Wadamanna is being gradually extended throughout the island.

A cable has been constructed to serve the Channel and Cygnet districts, and proposals are now being put forward to extend this to Franklin, Huonville and Geeveston. Besides being a convenience to the householder for domestic purposes and lighting, a fair number of horse power is being utilised in the manufacture of wood-wool, case making and for drying and evaporation purposes. The scheme opens up big possibilities for the Huon, especially in the economic treatment and processing of fruits.

Assistance to Fruitgrowers.

After passing through the House of Assembly, the Bill giving power to the Government to authorise a loan to be used in assisting fruitgrowers in necessitious circumstances, was defeated in the Legislative Council by a large majority.

The measure was introduced to enable growers who were hard hit last season to carry out the essential treatments of spraying and manuring for the production of the 1925 crop.

The fruitgrowing industry is up in arms against the treatment the Bill has received, especially as the small amount necessary would be the means of keeping many families on their holdings.

The Government would be well protected, in that advances would be a first charge on fruit returns, the money to carry interest at 6 per cent. This is a time when such a measure should receive the support of all parties, especially as it will tend to prevent the present day influx from the country to the towns.

Port Huon Fruitgrowers' Association Ltd.

The annual meeting of the Port Huon Fruitgrowers' Association was held at Hobart, a satisfactory attendance of shareholders being present.

The capital turnover of the Company during the past year was £285,000, the salaries of the staff being only 1 1-3rd per cent. of that amount. The company has consolidated its position during the year. The assets, comprising land, buildings, plant and machinery, to the value of £22,858. Next year, if the company followed the principle upon which it had been acting, the paid-up capital would be more than double the fixed assets. Paid-up capital amounts to £17,193; reserves, £6,424.

In common with most fruit associations, the returns over the last season had been disappointing, although the later boats would improve matters as prices generally appreciated.

The election of three directors resulted in Messrs. Frank Cole (Ranelagh), Luke Williams (Glenorchy), and Frank Combes (Geeveston) being chosen.

STATE ADVISORY BOARD.

A MEETING of the Tasmanian State Advisory Board was held at Hobart on September 16th.

There were present:—Messrs. A. Davies (Chairman), F. Walker, N. Campbell (M.H.A.), J. H. Astell, E. H. Thompson (H. Jones & Co.), A. Crowder (Port Huon Co.), H. D. Calvert (M.L.C.), V. Skinner, V. Shoobridge, B. J. Pearsall, T. J. Eddington, and the Secretary, P. H. Thomas. Mr. A. H. Ashbolt was present by invitation.

The Chairman introduced the ex-Agent-General (Mr. A. H. Ashbolt) who outlined his views on the main essentials for the successful marketing of Australian primary products in the United Kingdom.

A vote of appreciation was passed to Mr. Ashbolt, and he was requested to formulate a scheme for submission to Australian Fruit Council.

Organising Fund.

The Secretary detailed the replies received from the shipping companies and agents in respect to the Board's request for the collection of the 1/16d. levy. It was decided that a sub-committee, consisting of Messrs. Davies, Campbell, Calvert, Thompson and Piggott, together with the Secretary, be formed to evolve a basis of contribution in respect to small and stone fruit growers and to interview interstate shipping companies.

Bonus on Fruit Exports.

Mr. Campbell stated that the Executive Committee of the Australian Fruit Council had interviewed the Prime Minister requesting a bonus of 1/6 per bushel on Apples exported.

It was decided to re-submit the matter to the Australian Fruit Council.

A vote of appreciation was accorded to Messrs. Piggott, Campbell and Honey for the able manner in which they had presented the case for the industry.

Limitation Period of Export.

It was decided, on the motion of Messrs. Skinner and Pearsall: "That this Board unanimously endorses the principle of a limitation period of export, as suggested by Geo. Monro Ltd., London, and that such be submitted to the Australian Fruit Council for consideration toward bringing it into effect." Carried.

Branding of Fruit Cases.

The Secretary submitted a suggested scheme, prepared by Mr. R. A. Black, in respect to the branding of fruit cases.

The Board was unanimous that the present regulations were generally acceptable to the industry, and strongly opposed any change, being of the opinion that the scheme would not be conducive to any material advantage or benefit.

Retailers' Representation.

It was decided to submit the item of representation of retail fruit traders on Advisory Boards to the Australian Fruit Council, but stating that Tasmania did not support the application.

Canned Fruit Standards.

The Secretary of the Australian Fruit Council wrote requesting recommendations from the Board in respect to canned fruit standards.

It was decided, "That the matter be submitted to the firms interested for report to the Board."

T. STOTT & SONS

Fruit Merchants

Established 1882

A Trial Consignment solicited from Growers in all States.

Prompt Settlement.

11 WESTERN MARKET, Melbourne

£1,275,000 LOST IN WAGES.

Evil Effect of Disputes.

During 1923, according to a report by the Commonwealth Statistician (Mr. Wickens) on labour in Australia, 274 industrial disputes occurred in the Commonwealth, involving 76,321 work-people, and involving an estimated loss in working days of 1,145,977, and in wages of £1,275,506.

The report shows that at the end of 1923 the number of trade union members was 699,743, of whom 608,820 were males and 90,923 females.

I can assure you as a fruitgrower, I appreciate the "Fruit World" and its field of information.

Wishing you and your publication every success. H. V. C.

New South Wales.

Murrumbidgee Irrigation Area.

Partially Developed Farms Available.

The Minister for Agriculture, Mr. F. A. Chaffey (who is also Chairman of the Water Conservation and Irrigation Commission) points out that there is at the present time a number of farms available for general application on the Murrumbidgee Irrigation Area.

These blocks are ready for immediate occupation, and would meet the requirements of intending settlers with limited capital. A considerable amount of developmental work has been completed on the farms. Only a small deposit is required.. Liberal terms are given to eligible applicants in respect of the payment of the value of Crown improvements, viz., by annual instalments extending over sixteen years.

An excellent opportunity is afforded by these farms to intending settlers to carry on and complete the development of the farms with less capital than would be required on an entirely unimproved block.

Particulars of the farms may be obtained from the Irrigation Commission Office, Union House, 247 George-street, Sydney, or from the Offices of the Commission either at Leeton or Griffith.

VALENSY GRAPE.

Valensy Grape.—"J.D.," Griffith, (N.S.W.) writes:—"I have heard rumours of a new Grape being in existence known as the "Valencia" Grape. It is supposed to be a prolific bearer similar to the Doradillo, with a hard, tough skin, like the Daria or Ohanez, and is believed to have been imported from Southern Europe. Would you kindly advise me as to whether such a Grape exists in Australia, if rooted vines of same are procurable, and whether this particular variety is suitable for the irrigation area and for export purposes."

Answer (by H. L. Manuel, N.S.W. Government Viticulturist).—

The Valensy is a white table variety, mid-season, producing large bunches of crisp berries. I do not consider it as an export Grape, nor a drying variety. I do not know where this variety would be procurable.

Answer (by F. de Castella, Victorian Government Viticulturist):—

Your subscriber no doubt refers to the "Valensy" Grape (sometimes spelt "Valensi"). To call it "Valencia" is incorrect, and likely to lead to confusion. Valencia Raisins are dried from Gordo Blanco.

Valensy has long been grown to a limited extent in this and other States under the name of Belas Blanco. At Roquevaire (S. France), it is called "Panse," being grown as a winter Grape, and formerly for Raisins. French Raisins have, however, been displaced by Spanish.

If we have not grown this fine Grape more extensively, it is because Waltham Cross (correctly named Rosaki), has been preferred, owing to its somewhat larger berry.

Valensy is a handsome, large, white, oval Grape, ripening about mid-season, or slightly later, and hanging well on the vine. It is a heavy bearer, and may be termed a general purpose Grape, being suitable for sale as a table Grape (export and local market) for drying and for wine making.

For export in the fresh state it shows promise. Although it does not store so well, or for so long as Ohanez, the fact that it is the Grape grown for shipment at Jijona (S.E. Spain) is a strong recommendation. It takes on a fine golden or russet colour, where exposed to the sun, making it very attractive. Further trials are desirable on a commercial scale.

It dries to a very fair Raisin: though not equal to Gordo Blanco or Rosaki (Eleme Raisins), this is far superior to Doradillo.

For wine it is very much superior to Doradillo. A wine made mainly from Valensy took a first prize as a light dry white at the last Royal Show in Melbourne.

Valensy is grown in many of our irrigated vineyards. I doubt if rootlings are obtainable, but cuttings might be procured from Mr. G. Hudson, of Merbein, or Mr. Bruce, of Tresco, who grow this vine. Valensy does very well under irrigation.

If your subscriber wants to get fruit quickly and cannot secure rootlings, he might plant resistant rootlings this winter and graft them to Valensy either in February next (yema), or in September, 1925 (cleft graft). These would bear fruit as soon as Valensy rootlings planted this winter, and have the advantage of being safe from Phylloxera.

In the Goulburn Valley man, it is most unwise to plant any other than resistant vines. Fair supplies of resistants are now obtainable at Nyah and Mildura.

Penfold's Lose Champagne.

A report from Sydney early in September stated that a strike occurred at Penfold's Minchinbury plant at Rooty Hill (N.S.W.). Within two days after the men ceased work 900 gallons of champagne started to ferment, the vinegar germ attacking a huge 1,200 gallon vat, out of which only 300 gallons could be corked up in time.

THE AUSTRALIAN CITRUS GROWER

CITRUS PACKING.

What South Africa is Doing.

South Africa has already made a name for her citrus fruits; and her export trade is undoubtedly going to be a very big thing in the near future. The whole success of the export trade depends on growers' ability to keep up their reputation for good fruit and good packing (states the "South African Fruitgrower").

Owing to the lack of skilled labour, the difficulties ahead are great; and every grower should make not only himself, but every member of his family an expert packer, so when called on to do so each of them can lend a hand; for only with the aid of every labour-saving appliance and expert and quick packing has a grower much hope of largely increasing his individual consignments. Every South African grower should see to it that only first-class fruit, put up in the best of style, goes from here, and should pride himself on his brand being known as covering only an even class of fruit season after season.

It must be kept in mind that competition becomes keener every year. It is for this reason that

growers should centralise

as much as possible, and not remain a number of scattered units. "Fruit centres" should exist so that growers can co-operate in every way possible to reduce cost of working and handling. It must be borne in mind that in the world's markets individual consignments do not count, but that large consignments from centres do; and districts should, therefore, adopt a uniform grade and pack.

The Packing House.

One of the first considerations should be the packing house, and every convenience should be provided. The packing house should be roomy, cool, well ventilated and well lighted, and with ample space for convenient working and storing the fruit, both unpacked and packed, until ready to be despatched, the size, of course, being governed by the quantity of fruit to be handled.

For a large shed, it is a great convenience if the teams carting in the fruit and delivering to the station can drive right through the shed, because this saves a lot of handling.

A sloping table should run along the side of the shed, or right round in the case of a large packing house.

A packing stand according to requirements should be provided that can be pushed along the table as the fruit is exhausted, to a further supply. The packing stand carries the case at a convenient angle for packing and a raised stand for the wrapping-paper.

Picking the Fruit.

When picking for export the pickers should be in charge of an experienced man, otherwise waste and damage occur.

H. M.
WADE
& CO.
Fruit Merchants
Prompt Advices of Sales
— CHEQUES WEEKLY —
471 FLINDERS LANE
MELBOURNE

The fruit should never be picked when wet or shortly after rains. Also, if it is possible, avoid the heat of the day; always permit the fruit to cool down before packing. When picking always place the full boxes in the shade of the tree and take great care not to bruise the fruit. To a certain extent grading can be done in the orchard. Allow the fruit to remain in tissue, as the wrapping prevents it from cooling quickly. All cases should be dry and clean when used. on the tables or in the lug boxes for a few days before packing. This allows the moisture to sweat out of the rind and toughens it. permitting closer and firmer packing.

The standard pack laid down by the Government, i.e.,

the diagonal pack .

is easily learned and permits the fruit to travel and carry with a minimum of bruising. By this method each fruit rests in the cavity formed by the fruits below, so the pressure comes evenly. All fruit must be wrapped for export; the wrapping serves as a cushion and prevents fungus diseases and rot to a very large extent from spreading to other fruit in the box.

Hot fruit should never be wrapped It is essential to brand the cases on the ends plainly and neatly.

COMMONWEALTH CITRUS RESEARCH STATION.

A large and representative gathering took place to witness the formal opening of the Commonwealth Citrus Research Station at Griffith on the Murrumbidgee Irrigation Areas, New South Wales, on Thursday, 4th September.

The opening ceremony was performed by Mr. Geo. J. Evatt, the Resident Commissioner of the Water Conservation and Irrigation Commission, N.S.W., who also planted the first tree. Mr. E. MacKinnon, representing the Commonwealth Institute of Science and Industry, also planted a tree. Other trees were planted by representatives of various public bodies.

The activities of the Station were outlined by Mr. E. S. West, M.Sc. (Agric.), after which visitors were given an opportunity of inspecting the laboratory and farm. Mr. West explained that the field work embraced experiments relating to the use of fertilisers, green manures, and soil treatment generally, with investigations into tile draining, etc., also citrus stock trials and propagation studies. The laboratory, which was a source of great interest, is fitted mainly for soil research. which forms an important phase of the station's activities.

The Station is financed jointly by the Irrigation Commission of New

South Wales and the Commonwealth Institute of Science and Industry. Its work is of national consequence, being the first station of its kind in the Commonwealth, and fills a long-felt adjunct to a rapidly growing and important industry. With such adequate equipment, the Station will be capable of approaching the many problems of the industry, both from a scientific and practical viewpoint, and there is no doubt but that the results achieved will be of inestimable future value to citrus growers particularly, and orchardists generally.

Mr. West, who is in charge, is a South Australian, having graduated with distinction in Agriculture at the Adelaide University, after which he continued his studies in America and Europe.

Mr. B. Martin, who has recently been appointed orchardist, obtained the Diploma of the Hawkesbury Agricultural College, after a distinguished career.

R. JOEL & SONS

16, 17, 20 RUSSELL ST.
Covent Garden Market

LONDON, W.C.2

And at 10 Vernon Street, LIVERPOOL

Open for Consignments of all Australian, Tasmanian and New Zealand Fruits

SALES BY PRIVATE TREATY ONLY.

WHICH GIVES THE BEST RESULTS

PROMPT RETURNS AND SETTLEMENTS.

Cash advanced to cover freight and overcharges, etc.

Cablegrams:
AINSJOLFRU-RAND-LONDON.

Agents Wanted in—
MELBOURNE, HOBART, NEW ZEALAND and WESTERN AUSTRALIA.

BANKERS:
National Provincial Bank Ltd., Long Acre, London. Barclay's Bank, Henrietta Street, Covent Garden.

Danger of Cyanide.—"The Florists' Exchange" records the death of Mr. E. A. Henby, a well-known Indiana nurseryman. His body was found in a building used as an office and storage room with a vessel containing cyanide. It is presumed that death was accidental, but in any case it serves to emphasise the danger in using this chemical: "Familiarity breeds contempt," and there is always a risk that those using cyanide frequently may grow careless, hence the need for giving publicity to the warning.—H.A.

IMPERIAL FRUIT SHOW.

Birmingham, October 24 to November 1.

Australia Sends Citrus Fruits for Competition.

Australia has sent entries of citrus fruits to the Imperial Fruit Show to be held at Birmingham, England, from October 24 to November 1st.

The fruit came from the States of New South Wales, Western Australia, and Victoria.

Great care was taken in picking and packing the fruit, which consisted of Washington Navel and Late Valencia Oranges. But for the adverse season, there would have been many more entries.

The bulk of the fruit was shipped on the s.s. "Largs Bay," which left Australia early in September.

STRAWBERRY CO-OPERATION.

Growers Work in Harmony with Wholesale Distributors.

The Cape Cod Strawberry Growers' Association is a band of 100 Portuguese farmers who are working out their economic freedom through co-operative marketing, states the "Canadian Horticulturist." The members can neither read nor write English, yet they understand the true principles of co-operation. The United States Department of Agriculture says:—

Here is the record made by these Portuguese farmers:—In 1916 the association marketed approximately 800,000 quarts of berries at a gross value of £9,800. The next year their output was only 334,000 quarts, but the gross price received was £7,600. In 1921 the return for 569,000 quarts was £25,600. In 1923, the crop was 1,045,000 quarts and the gross return £26,600.

The secret of success of the association is the high quality product, carefully graded and packed. Each day's shipments are pooled and sent to Boston on consignment. A demand has been created that takes practically all the berries the association can market.

VICTORIAN FUMIGATION FARCE.

The Department's Chamber is 15 Years Behind the Times.

Great dissatisfaction has been felt by the Horticultural and Agricultural interests of Victoria, because of the inadequate facilities at the Department's Fumigation Chamber. The Nurserymen and Seedsmen's Association of Victoria recently approached the Minister for Agriculture in writing regarding the matter, drawing his attention to the fact that the present fumigation chamber was set up over 20 years ago, and that it is now utterly insufficient to cope with the work. Of recent years the Interstate Regulations regarding the import and export of seeds, plants, fruit, etc., have become more stringent, with the result that increasing demands have been made on the fumigation chamber.

The Association further stated the following instance—only one of many—to the Minister as an instance of the severe loss to trade. During the current month an order came from New Zealand for 900 bags of Japanese Millet seed. According to the New Zealand regulations, this seed must be fumigated before leaving Victoria. In spite of the best services of the Department's offices, only 300 bags could be fumigated and sent forward. The rest of the order was cancelled, it being impossible to ship the seeds in the required time. The Association asked for the opportunity of placing additional details before the Minister by deputation.

SWANN & Co.

Established 1822.

A century's experience in handling

FRUIT OF ALL DESCRIPTIONS

All Consignments for U.K. will have Personal Supervision and Attention

Account Sales and Cheques despatched immediately after sale.

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Cables:—FIREBRICKS, LONDON
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Australian Representative
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Victorian Agent: H. M. Wade & Co., 471 Flinders Lane, Melb.

J. G. MUMFORD

Est. 1906.

Fruit Merchant

Fruit and Vegetables sold for growers from all States.

Account Sales posted daily.

Exporter

Exporter of fruit to English and Continental markets.

449-451 Flinders Lane, Fruit Exchange, Melb.

Reference—Satisfied Growers in all States.

Minister's Reply.

The Minister for Agriculture (Hon. E. J. Hogan) promptly replied to the Association's letter, in the course of which he stated:—

". . . I desire to say that I am fully seized with the whole of the circumstances in connection with the matter, which is at present receiving careful consideration. In view of this, I feel that it is unnecessary to take up the time of the delegates of your Association in an interview."

It is understood, however, that the Association is pressing for an interview with the Minister, as the matter is urgent.

APPLES AND BLACK SPOT.

Tasmania's List of Susceptible and Resistant Varieties.

(By P. H. Thomas.)

The following list is compiled on observations extending over the last ten years. During this period, Tasmanian crops suffered considerably in the seasons 1917 and 1924 from the effects of this fungus, owing to the climatic conditions experienced, being conducive to the development of the disease.

There are two outstanding features in connection with these lists that are worthy of notice, and which may form an interesting line for research work in this direction:—

(a) The resistant varieties are generally late blossoming varieties.

(b) The resistant varieties are generally all characterised by a "greasy" outer skin.

The late blossoming habit no doubt may be responsible for the variety missing the acute stages of spore discharge, and it is also reasonable to suggest that the differences in skin texture may have an influence as a host for the development of the disease.

Highly Resistant:

Alfriston
Coleman's Pearmain
Fanny
London Pippin
Stone Pippin
Tasman's Pride
Worcester Pearmain

Resistant:

Adam's Pearmain
Alexander
Aromatic
Crow Egg
Cox's Orange Pippin
Dumelow
Foster
French Crab
Jonathan
King Pippin
Lord Suffield
Ranelagh
Ribston Pippin
Reinette du Canada
Rymer
Scarlet Pearmain

Susceptible.

Allington
Bismarck
Ben Davis
Commerce
Duke of Clarence
Dunn's
Granny Smith
Hoover
Lord Wolsley
Nickajack
Newtown Pippin
Perfection
Prince Alfred
Rokewood
Spitzenberg
Strawberry Pippin
Tasma
Yates

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We are the Leading Australian Firm of FRESH FRUIT EXPORTERS, JAM MANUFACTURERS (IXL Brand), FRUIT CANNERS, HOP FACTORS (owning the largest cool stores for this purpose in the Commonwealth).
Supplies of Corrugated Strawboard, Genuine Sulphite Paper, Nails and best Packing Materials available at all times.
Sole Distributing Agents for the Southern Tasmanian Associated Manufacturers of Evaporated (dried) Apples.

Agents for—
Federal Steam Navigation Co. Ltd., Scottish Shire Line of Steamers, Osaka Shosen Kaisha, London Assurance Corporation.

Correspondence Invited.

H. JONES & CO. LTD.,
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Fruit Shipments
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W. D. PEACOCK
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24 Martin Lane, Cannon St.
LONDON, E.C., 4
AND HOBART, TASMANIA
Solicit Consignments

The High Standing and Long Experience of this Firm is a Guarantee that the Best Interests of Consignors will be conserved.

Very Susceptible.

Cleopatra
Crofton
Delicious
Fameuse
Gravenstein
King David
Rome Beauty
Sturmer Pippin
Scarlet Nonpareil
Senator

Fruit Tree Stocks.

At the recent Pomological Conference in Hobart the matter of fruit tree stocks was again brought up for discussion, delegates giving their experiences in the different States in this respect. Samples of fruits from the Siberian Crab (Pyrus baccata), and a variety known as Niedwitz Gledeana, were submitted to the Committee by Mr. Thomas, as those which had given the best results in the experiments conducted for raising blight resistant seedlings, the latter so far having given 100 per cent. clean plants, and proving suitable for working the main export Apple varieties.

The following resolution was unanimously agreed to:—

That the Commonwealth Government be asked to subsidise the various States on the pound for pound principle up to £1,000 per annum for the purpose of establishing fruit stock experimental stations.

FRUIT GRADING.

At the Royal Agricultural Show at Melbourne in September, a special display was made by the Lightning Fruit Grader Co., of Collingwood, Victoria. Nine models of "Lightning" Fruit Graders were displayed, also the special Onion and Potato model, of which satisfactory reports have been received from experts and leading Potato growers.

Graders were shown in sizes suitable for large or small orchards. The Apple grader has a special rubber roller.

Special attention was paid to the new Peach grader, which had a fine reception from growers. One grower who paid £27/10/- for his machine, stated that it saved its cost in two days, the grader having replaced ten men who were paid on the average £4 per week. The machine, after receiving the fruit from the conveyor feeder, grades out into the first bin all the Peaches under 2¾ in. in size, these being unsuitable for canning. All the Peaches over 2¾ in. pass on to revolving rollers, which are like the rollers of a conveyor belt. The fruit is turned gently over and over as it passes along, thus exposing all sides and enabling the grower to satisfactorily sort his fruit before sending it to the factory. The great advantage is that the grower can thus pack and forward graded fruit and save the paying of freight on fruit which might otherwise be rejected at the factory door. The grader has a capacity of handling up to 1,500 bushels per day, and can be worked by hand or power. It is portable, and can be used in the packing shed or on the orchard—in fact, many growers find it of advantage to carry the grader about from place to place in the orchard to do the grading before the fruit is carted to the shed.

The manufacturers of "Lightning" graders report that there has been big enquiry for their machines, and that the sales at the recent Show constituted a record, the total value running into well over four figures.

SELLING FRUIT IN MELBOURNE SUBURBS.

Restrictive Regulations Relaxed from 1st October.

Echo of the "Fruit World's" Successful Campaign.

FROM the 1st of October each year the restrictive regulations on the sale of fruit in Melbourne suburbs are withdrawn. For the past five months no fruit has been sold after 7 p.m. four nights per week in the Melbourne suburbs.

MARGETSON
& CO. LTD.

Fruit Importers & Salesmen

30 James St. and James St. Warehouses,
11 Neal St.,
COVENT GARDEN
LONDON, W.C.
and at
Jamaica House.
9 & 10 Botolph Lane, London, E.C.
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Sales by PRIVATE TREATY.
Prompt Returns & Settlements
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LLOYD'S BANK LIMITED
Law Courts Branch, Strand, London, W.C.

TASMANIAN AGENT
A. J. WALSHE,
41 Collins Street,
HOBART.

Indications are not lacking that the greengrocers, or a majority of them, desire to revert to the previous system under which they could sell fruit without restrictions in the evenings throughout the entire year,—more especially since the advent of the suburban picture shows.

This brings to mind the successful fight put up by the "Fruit World" in assisting to have removed the iniquitous restrictions on the sale of fruit in the city proper.

In 1919 suburban fruit shopkeepers requested by petition that all fruit-shops should compulsorily close at 7 p.m. four nights per week for five months of the year (viz. from 1st May to 30th Sept.) Suburban shops thus closed, but the restriction was also (under protest) made to apply to the City of Melbourne itself. The shopkeepers in the city however, were permitted under an "exemption" clause to keep open as restaurants or to sell lollies, but they had to cover up or lock away the fruit.

In 1921 this exemption was withdrawn and city shopkeepers had to face two alternatives,

(1) If selling fruit during the day they must **close their doors** at 7 p.m., —or

(2) if desiring to do any evening trade as restaurants or selling lollies etc., **they must sell no fruit at all during the day.**

Many chose the latter and the fruit trade seriously fell away. Others continued to sell fruit during the day and locked it away at 7 p.m. as usual. **The latter were fined in the courts.**

It cost one shopkeeper £400 in legal expenses for the dreadful crime of selling fruit in the daytime in the City of Melbourne.

The "Fruit World" fought vigorously and had the satisfaction of seeing an Act of Parliament put through freeing the City of Melbourne from these disastrous restrictions.

During the period of the restrictions there are big boat races in Melbourne, also the Royal Agricultural Show, when the city is crowded with visitors. But for the fight put up the restrictions on the sale of fruit would have continued.

Members of Parliament, notably Mr. W. H. Everard M.L.A. fought splendidly; the assistance of many fruitgrowers associations and the services of the press were appreciated.

This is a matter of particular concern to Citrus growers, as well as of course, to the producers of Apples, Pears, Pineapples, Bananas etc.

The "Fruit World" would be glad to give its services in a campaign to remove the restrictions on the suburban trade.

Here then is an opportunity for the Citrus Associations to "develop new markets" in winning back for the growers a very real and important outlet for their fruit during the months when supplies are heaviest. This market is right at our doors,—the suburbs of Melbourne.

These restrictions on the sale of fruit apply nowhere else in Australia, in fact we know of no other place in the world where the sale of Nature's own healthful fruit food is similarly restricted.

A keen sense of fun and kindly humour is a fairly good indication of brains and force.

Couldn't Stall Him.

Whilst down for the Agricultural Show in Adelaide, a countryman took his sweetheart to a city theatre.

Going to the ticket office, the girl hanging on to the sleeve of his coat, he banged down some money, and said—

"Twa seats."

"Stalls?" inquired the ticket clerk.

"Look here, my man," said the countryman rather sharply. "Dinna think because we come frae the country that we're cattle. Gie's two cooshioned seats."

Edward Jacobs
& Sons
Covent Garden Market
LONDON, England

Solicits Consignments of Australian Fruit.

Tasmanian Representative:
W. D. Peacock & Co. Ltd
PRINCES WHARF, HOBART

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COVENT GARDEN, LONDON
Ridley, Houlding
& CO.,
Large Receivers of Australian Fruits.
Solicit Consignments of
Apples, Pears, &c.,
Best market prices and prompt account sales returned.
Correspondence invited.
Representative in Victoria
THE
International Fruit & Mercantile Co.,
410 Flinders Lane, Melbourne
MURDOCH BROS., Hobart

APPRECIATION.

Subscriber for 25 Years.

Somerville, July 26th, 1924.

Dear Sir,—

Enclosed please find cheque in payment of two years' subscription in advance to the "Fruit World."

I have been taking your "Fruit World" journal since the first was published, and have found it a very useful paper.—Yours faithfully,

(Sgd.) H. H. H.

300% INCREASE!

A Grower using a "Lightning" Fruit Grader all through this season says that his output has increased by 3 to 1

JUST THINK OF IT!

He now packs **300 cases** in the time it used to take to pack 100 cases.
Are we not justified in saying that you **cannot afford to be** any longer **without a**

"LIGHTNING" FRUIT GRADER

The Grader which can never be superseded. The Grader with an Established Reputation and an Ever Increasing Popularity

Hundreds of interested growers at the Melbourne Royal Show have added their testimony that the "Lightning" Graders are the BEST AND MOST SUCCESSFUL THEY HAVE EVER SEEN.

Capacity up to 1,000 cases per day.

Grades APPLES, PEARS, PEACHES, APRICOTS, ORANGES, PASSION FRUIT, &c.

CANNOT BRUISE THE FRUIT.

Prices from £18/15/-

The "LIGHTNING" Combined GRADER and INSPECTION SORTER

This is the greatest labor-saver ever offered to the jam and canning fruitgrower. The Conveyor gently turns the fruit over and over, enabling the grower to sort out all that is blemished or overripe, and when attached as a feeder to the Grader, they make a perfect combination. Capacity up to 1,500 cases per day.

Lightning Fruit Grader Co.

109 CROMWELL STREET, COLLINGWOOD, Vic.

Telephone J 1084.

Cable and Telegraphic Address: "LIGHTNING" Melbourne

MELBOURNE ROYAL SHOW.

The Royal Agricultural Society of Victoria carried out its usual magnificent programme at Melbourne in September, attracting visitors from all the States and New Zealand. The organising work of the Secretary, Mr. Henry Schweiger and his staff, was of a high order.

The exhibits of live stock, as well as the displays of manufactured goods and implements was of great educational value.

In the agricultural hall the fruit exhibits showed excellent quality. The six pyramids set up by the Cool Stores Associations made an attractive display.

Prizes for the Pyramids were awarded as follows:—(1) Wantirna, (2) Burwood E., (3) Ringwood, (4) Tyabb. Wantirna thus retains the Lord Novar perpetual shield for the second successive season. The display by the Heatherlea Cool Store was much admired.

For various dishes and collections of fruit, prizes were won by Messrs. J. Tainton & Sons, A. E. Collins, W. G. Whicker, A. B. Herbert, W. Liscombe, A. N. Jones, J. D. Grant, W. A. and A. E. Thiele, H. E. Palmer.

Citrus Fruits.

In the citrus section, only one entry (that of the Victorian Central Citrus Association) was put up as a State exhibit, which thus had a walk over. The exhibit was very tastefully arranged, and reflected credit on those responsible for its staging.

Prizes in the citrus section were awarded as follows:—

Oranges.—Washington Navel — 1, W. Missen; 2, Miss C. Midgley; 3, S. H. Scott. Late Valencia—1, W. E. Missen; 2, J. L. Holland; 3, J. Moritz. Mediterranean Sweet, Queen, White Siletta, Joppa, or Jaffa—1. W. E. Missen; 2, J. L. Holland; 3, W. E. Missen. Lemons.—Lisbon, Eureka (sweet rind), or Villa Franca—1, J. L. Holland; 2, J. Moritz; 3, S. H. Scott. Pomelo or Grape Fruit—1, E. G. Wood; 2, Riverside Citrus Association. Mandarins—1, W. E. Missen; 2, Riverside; 3, E. G. Wood. Collection of Citrus Fruits—1, Delta Citrus Packers' Association (Curlwaa); 2, Riverside; 3, Tresco Association.

Fruit in this section drew forth many pleasing comments by the general public.

TROPICAL FRUITS.

Queensland Scores a Triumph.

For gripping the public interest, and for educational value, the exhibit of the Queensland Department of Agriculture was of the highest order.

The central feature of the exhibit was that of Pineapples so formed as to appear like one huge Pineapple 12 feet high.

Illustrations and specimens of Pineapples under actual growing conditions were appreciated by the public. Few southern people have any idea of the manner of growth of these delicious and healthful fruits.

Also, as regards Bananas—the method of growth was demonstrated.

The exhibit included excellent specimens of citrus, Pineapples, Bananas, Cocoanuts, Papaws. Of the latter a tree was shown with the fruit on it.

"What's them green things?" one excellent dame was heard to ask.

"Oh! I dunno," responded her companion. "Oh! yes, they're papaws. Look at the label. I suppose you have to cook 'em."

Doubtless the officer in charge, Mr. W. Rowlands, could tell many amusing incidents if he chose to.

It is safe to say that the Queensland exhibit was one of the greatest attractions in the Agricultural Hall.

FOR SALE.

MOTOR SPRAYER, "DONCASTER," good order; just overhauled at cost of £30, maker's written guarantee. Price, £75, cash or terms. Would sell without engine.

Also double disc Newell Sanders Plough, £12. Harvey 3-F. mouldboard circular coulter, £16.

BOX 9, Horsham.

QUEENSLAND'S FRUIT MARKETING SCHEME.

Only Pineapples and Bananas are Controlled.

IN ORDER THAT our readers might be kept in touch with movements in matters relating to the fruit industry, we published in the July issue of the "Fruit World" a full report of the speech which the Manager of the Queensland Committee of Direction of Fruit Marketing (Mr. W. Ranger) delivered before the last meeting of the Australian Advisory Fruit Council.

We have also published at various times criticisms which growers have offered.

The compulsory fruit marketing scheme, as adopted by Act of Parliament in Queensland, is unique. We know of no other place in the world where similar measures are in force.

It is only by publishing the pros and cons, in strict fairness, that leaders in the fruit industry throughout Australia can be kept in touch with important happenings.

In his address before the Australian Fruit Council, Mr. Ranger was careful to point out:—

(1) That the control only applied (so far) to Bananas and Pineapples.

(2) That experience had shown that Pineapples were essentially a cannery proposition.

(3) That the Committee of Direction was fortunate in being able to take over the satisfactorily running business of the Southern Queensland Fruit Society Ltd., the organisation which had inaugurated and successfully conducted the "fruit train" system from Queensland to Sydney and Melbourne.

And it might have been added that the Banana trade was virtually an Australian monopoly, there being a prohibitive tariff on importations.

It appears then—and this will be of interest to our Western Australian friends who are considering a similar scheme—that for the fruits outside the two mentioned, the trade flows on as before, viz., the consigning of the fruit by the growers to their agents, and the sale of the fruit on commission.

On the other hand much useful work for the growers has been accomplished.

There is no magic in an Act of Parliament giving a committee wide powers. Any marketing scheme must stand or fall by the efficiency with which it is handled.

Queensland is fortunate in having such an able and courteous man as Mr. Ranger at the head of the Committee of Direction.

It is quite possible, however, that he will be an old man before he is a young one, considering the labors which have devolved on him, duties which include, amongst many others, the preparing of details and statistics for Ministers to answer questions in Parliament. Then some day he may make a mistake, as we all do at times, or possibly political pressure will be brought to bear, and Mr. Ranger may be thrust aside. It has happened before. (Not long ago a co-operative company in a certain State failed after being "blessed" in the appointment of a manager on high political recommendation.)

To a man of Mr. Ranger's attainments, such a procedure might not prove troublesome, as rumour hath it that he has already been offered positions of importance with commensurate salary.

The Queensland Fruit Marketing Act is for three years' duration. If fifty per cent. of the growers vote against its continuance it will not be re-enacted.

It is for the Queensland grower to give his verdict when the time arrives, as to whether the compulsory system is to last or not.

Meanwhile, the greatest complaints are heard from the Banana growers, i.e., one of the sections over which the Committee of Direction has taken control.

The limitation of agents is one of the chief sources of soreness.

The following is taken from a a Queensland monthly journal ("Nicko's") for August, 1924:—

> "There is a vast difference between Ranger, good Britisher and now good Australian, and Ranger, manager of a concern which would never be given such drastic power in any other country in the world, except perhaps Russia.
>
> "And even in that country the scheme would fail, as it assuredly will fail here in sunny Queensland, where we boast of living under two flags which proclaim proudly that all people living beneath them will enjoy freedom and justice.
>
> "All interested in the Queensland fruit industry to-day have precious little freedom. They are practically tied up, body and soul.
>
> "But a change will come over the spirit of the scene ere long. That is as certain as daylight to-morrow."

* * *

Then what of Levies?

There is in Queensland a Council of Agriculture, also incorporated by Act of Parliament.

So far the Government has found over £55,000 for this organisation. Mr. Theodore, the Premier, is proud of his Agricultural Council. He claims much political success because of it. Selected members of the Victorian Labour Party recently visited Queensland to learn how Mr. Theodore won the farmers, and they have absorbed the idea of legislation which presumably aims at assisting the man on the land to better organise his industries.

Now, the Queensland Government tells the producers they must pay for the privilege of having a Council of Agriculture, whether they want it or not, and the farmers and fruitgrowers are sitting up rubbing their eyes in wonderment.

As regards the fruitgrowers, they are now called upon to find £2,000 as their share to the Council of Agriculture. And it is no use saying nasty things because the money is deducted from their account sales. Meanwhile, the Council of Agriculture seems to be slipping downhill. Reorganisation is already proposed.

* * *

Further comment on these subjects will appear in subsequent issues of the "Fruit World." Correspondence from readers is always welcome.

PRIMARY PRODUCERS' "POOLS."

Some of Them are Muddy.

Queensland Gets Fierce.

The subject of pooling of primary products in Queensland is such a live one that the "Queensland Storekeeper" turns Bolshy and gets this off its editorial chest:—

> "Wheat pools, maize pools, egg pools, fruit pools, etc., and without end! This seems to be the policy in Queensland at the present moment. The consumer is not consulted in any way—he just has to pay and look as pleasant as possible. He certainly doesn't benefit, and we doubt whether the producer will benefit to any great extent. The pools have the effect of levelling down instead of encouraging the best efforts by the producers. Pools seem to us to be for the benefit of the lazy man—the careless man—the man who wants to saunter through life. The up-to-date man will find that he has just been levelled down to the rank of the lazy producer, and the only satisfaction he will have is in the fact that he is keeping a new army of civil servants and derelict politicians who would otherwise be out of employment."

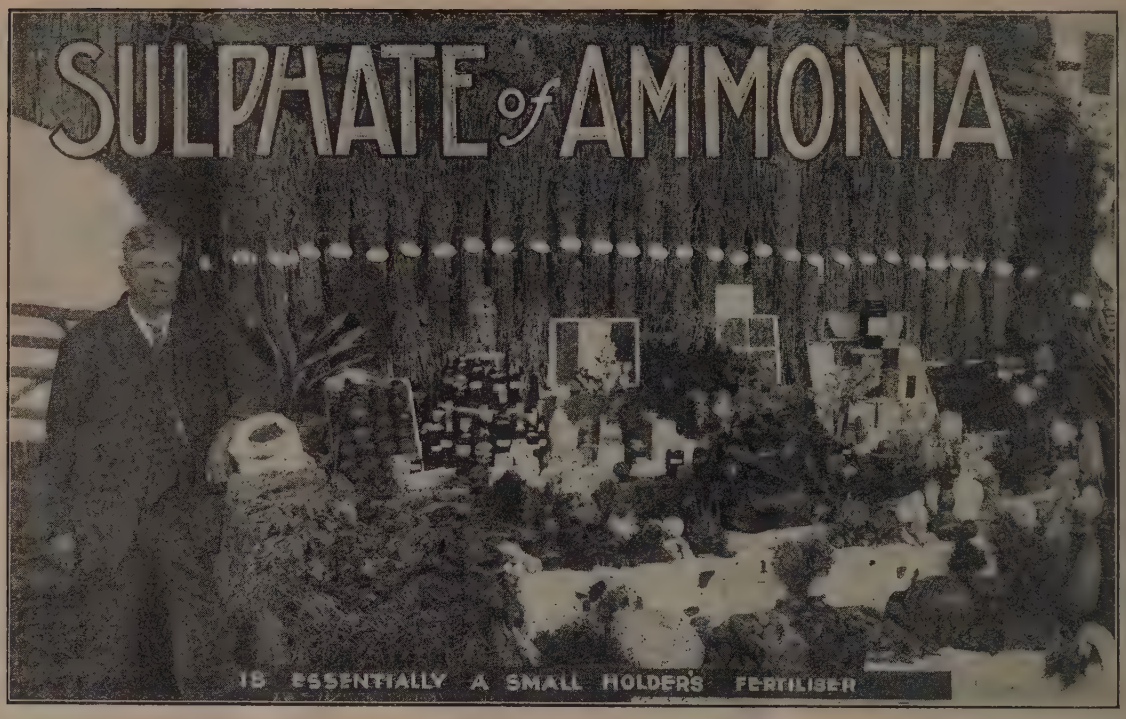
The only "control" which did not get a knock was the "Sugar Control," so the "Fruit World" must put in its chirp.

QUEENSLAND.

Nambour Fruit Show.

A Correction.

A correspondent draws attention to the report in our last issue regarding prize winners at the Nambour Fruit Show. The points for the special prize donated by Mr. E. B. Fox for the exhibitor gaining the greatest number of points in the citrus fruit section were awarded as follows:—Mr. D. F. Story (Mapleton), 48 points; St. Isidore's Mapleton Farm College, 45 points; and Mr. J. T. Tennent (Mapleton), 37 points.



J. LODGE'S PRIZE-WINNING "ONE MAN FARM" EXHIBIT AT BACCHUS MARSH SHOW, 1922

Sulphate of Ammonia literature from—

The Australian Gas Light Co., Haymarket, Sydney, N.S.W.; The Broken Hill Prop. Co. Ltd., Newcastle, N.S.W.; The North Shore Gas Co. Ltd., 193 Alfred Street, North Sydney, N.S.W.; The Metropolitan Gas Co., 196 Flinders Street, Melbourne, Vic.; South Australian Gas Co., Weymouth Street, Adelaide, S.A.

ORCHARD AND VINEYARD SPRAYING.

Oil Sprays are Effective in Getting Rid of Scale and Insect Pests.

THE VALUE of petroleum products for effectively dealing with scale and insect pests in orchards and vineyards is dealt with in an article which appeared in a recent edition of a Californian bulletin, to which attention has been drawn by the Vacuum Oil Co., Melbourne.

The article is as follows:—

On the Pacific Coast, where the art of growing things has attained a stage of development whereby it may be rated as a scientific pursuit, it is realised that the successful production of orchard crops and certain farm crops is in a large measure dependent upon the efficacy of sprays serving to control insect pests and fungous diseases.

In this field the past year has seen the displacement, to a very great extent, of such old standbys as the lime-sulphur spray; and the insecticide that has displaced it is an oil spray.

The use of petroleum products for this purpose is not new. For many years kerosene emulsions and crude-oil emulsions have been used in combating certain pests. However, these emulsions were lacking in uniformity and effectiveness, and far from satisfactory. On this account there has been a vast amount of research done both by manufacturers of spray materials and by the experiment stations of agricultural colleges. The result has been the determination of the particular types of oil best adapted to the manufacture of emulsions for insect control. Formulas have been published, and most effective proprietary products have been developed.

A bulletin issued the first of this year by the Oregon Agricultural College Experiment Station at Corvallis deals with "The Preparation of Spray Materials," and devotes much space to "Mineral or Lubricating Oil Emulsions" and the preparation of the formulas that have proved most effective.

San Jose Scale.

Among the orchard pests none is more notorious than the San Jose Scale, a minute pimple-like scale, ash-grey or black in color, which takes up its residence in clusters on the bark of fruit trees. This scale gives a purple stain to the inner bark and rapidly saps the life of the tree. It also gets on the fruit, causing bright red spots.

For years the standard spray used against this pest was a lime-sulphur solution, but recent research work proved that a properly made oil spray is far more effective, and, at the same time, more economical. In consequence, thousands of barrels of oil spray were used this spring in combating the San Jose Scale.

The Leaf-Roller.

Another orchard pest which is most effectively overcome through use of an oil spray, is known as the Leaf-Roller, which has been doing an increasing amount of damage during the past five years. Owing to its peculiar habits it is possible to control this insect only through use of oil spray. Other means have failed to gain satisfactory results to any extent. The Leaf-Roller winters in the egg stage, oval masses of which are attached to the twigs and branches of the trees.

These eggs, laid in early summer, are covered with a waxy coating, which protects them from the action of most insecticides. They hatch about the time the first green leaves appear, and before starting to feed the young worms, generally crawl into the fuzz surrounding the open cluster of buds, or force their way into the small blossom buds. They fold the petals or leaves around them, forming a case that spray material cannot reach.

Because of this, the orchardist must attend to the Leaf-Roller while it is in the egg stage. A very penetrating insecticide, such as the oil spray, is not rendered ineffective by the waxy coating on the eggs. In districts infested by the Leaf-Roller, oil sprays are best known and generally used.

Numerous other orchard pests also are most successfully controlled with oil spray, among them being several varieties of **aphis, red spiders, and mites.**

It is stated by F. A. Olmsted, President of the Hood River Spray Company, that Prof. A. L. Melander, of the State College of Pullman, Washington, E. J. Newcomer, of the United States Bureau of Entomology at Yakima, Washington, the Horticultural Office in Boise, Idaho, and experts connected with leading experiment stations and horticultural offices in various parts of the country are now giving oil sprays preference over lime-sulphur solutions for combating orchard pests.

The present indications are that petroleum products are destined to play an increasingly important part in connection with this phase of the fruit industry, particularly on the Pacific Coast.

THE DRIFT TO THE CITY.

Country Districts are Suffering.

A special committee of enquiry in N.S.W. recently presented a report dealing with the drift of the country population to the cities.

This challenges the best thought of the community. The report states:—

"The lure of the city" exists because of the terrible contrast presented when one studies the attractions of city life with the primitive conditions associated with life in the country.

Witness after witness has stressed the fact that the young people are leaving the country to live in the city because of these things:—

(a) Facilities for education in the city, as against difficulties of education in the country.

(b) More social pleasures in the city, as against lack of society in the country.

(c) High salaries or wages, and shorter and more regular hours of work in the city, as against labor conditions in the country.

(d) For the women; more conveniences in the houses, more comforts, better medical and nursing attendance, and greater facilities for travelling in the city, as against more drudgery in the ill-equipped home, bad roads to travel, difficulties in obtaining medical or nursing aid, and costly travelling and higher costs of supplies arising from freights, in the country.

* * *

It behoves all interested in the progress and prosperity of our seriously under developed Island Continent to weigh the foregoing summary, and to take active steps to prevent the undue drift to the cities to the harm of rural settlements.

SUBSCRIBERS' PAYMENTS RECEIVED.

The following are the subscriptions received from August 20th to September 20th, 1924. The month quoted in parenthesis indicates to what date the subscription is paid. These are exclusive of the subscribers who have paid to local agents or to our offices in the various States:—

Z. Akers (Aug., '26), Abbotts Bros. (Aug., '24), Adelaide Chemical and Fertilizers Co. Ltd. (Jun., '25), Algemeene Vruchten Import, Maatschappy (Apr., '25), W. R. Archibald (Nov., '25), J. W. Aspinall (Aug., '25), P. Beecroft & Co. (July, '25), R. G. Bell (Aug., '25), W. Boatman (Aug., '25), H. K. Brooke (July, '25), J. D. Bryden (June, '25), E. J. Casey (July, '24), W. B. Chaffey (Aug., '25), T. J. Cooper (Aug., '25), G. G. Cole & Sons (July, '25), Hon. A. A. Davey, M.L.C. (Apr., '25), J. A. Egan (Sept., '24), J. C. Ellis (May, '25), Errey Bros. (Oct. '24), A. P. Fankhauser (Apr., '25), W. F. Ford (Sept., '24), W. Francis (Aug., '25), F. C. Freeman (Sept., '24), E. N. Gamble (July, '25), J. Kemp Glasson (June, '27), J. Grasby (Sept., '24), C. G. Grasby (Aug., '24), J. E. Gramp (Sept., '25), Consul for Greece (May, '25), W. M. Green (July, '25), C. Gubler (July, '25), G. de La Haye (Aug., '25), Robt. Hoggan (Aug., '25), Jas. Hooton (June, '25), Irymple Packing Pty. Ltd. (Aug., '25), W. G. Jennings (Mar., '25), R. Kilpatrick (Aug., '25), A. W. Knee (Oct., '24), Geo. Knee, Jnr. (July, '25), G. E. Kneebone (Aug., '24), H. J. Lantzke (Oct., '22), A. Lauer (Aug., '25), H. M. Leggo & Co. (Aug., '25), H. J. Manning (June, '25), A. I. Manoy (June, '24), D. J. Murphy (Sept., '24), Knox Moore (Aug., '25), J. R. Morris (Aug., '25), J. J. Mills (May, '25), A. F. Morant (Aug., '25), Murray View Irrig. Co. Ltd. (Aug., '25), J. McGrath (July, '24), C. E. Norris (Sept., '24), C. H. Ozanne (Aug., '25), H. R. Paton (Aug., '25), R. H. Pearce (July, '25), T. M. Price (Aug., '25), W. Ranger (July, '25), G. Richards (July, '25), T. B. Robson (June, '25), E. Rohrlach (Aug., '24), C. L. Rutty (Sept., '24), W. J. Shaw (Sept., '24), Mrs. Shead (June, '25), E. C. Short (Sept., '24), Sir Thos. Smartt, M.L.A. (June, '25), D. A. Smith (Feb., '25), A. Steen (Aug., '25), E. F. Steinmetz (Aug., '25), J. G. Streitberg (Sept., '24), A. E. Thiele (July, '25), R. Toogood (Sept., '24), A. Trinham (Sept., '25), B. T. Turner (Mar., '25), Walters & Co. (Dec., '24), S. D. Walker (Oct., '24), A. G. Wallace & Co. (Apr., '25), Waterman Bros. (Aug., '25), G. L. Ward (Aug., '25), Mrs. Watson (Sept., '24), N. C. Western (Sept., '24), Williams Bros. (July, '25), T. G. Williams (Sept., '25), E. E. Wills (Mar., '25), J. T. Wright (Sept., '24), Yenda Producers' Ltd. (July, '25), A. & W. Young (June, '25), E. V. Yeomans (Mar., '25).

Classified Advertisements.

Wanted and For Sale.

Advertisements under this heading, which cannot exceed one inch, will be classified as far as possible.

Prices are as follows:—

Casual Advertisements, one or three months—9d. per line of six words. Nine lines to the inch.

Contract Advertisements, six or twelve month, 6d. per line of 6 words, 9 lines to the inch.

Send cash with order.

BOOKS.

PRUNING FRUIT TREES, By C. Quinn. Illustrated. 5/- posted—"Fruit World," 9 Queen Street, Melbourne, Vic.

ORCHARDISTS. TOBACCOLEAF FOR SPRAYING. Order while supplies are available. 56/- cwt. on rails, Melbourne.

BRUNNING,
64 Elizabeth Street, MELBOURNE.

WE BUY LEMONS

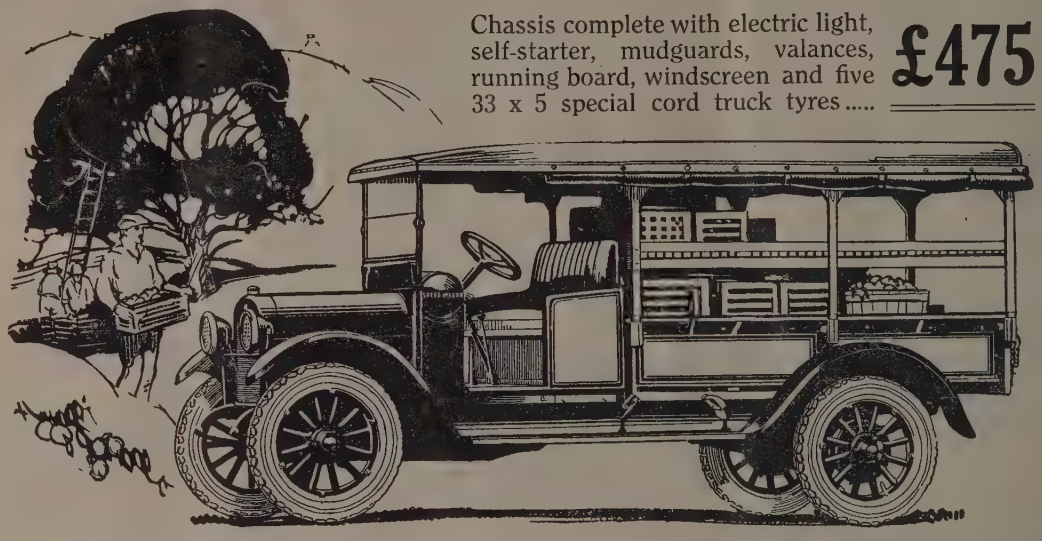
Green Citrons and Shaddocks, Seedling Oranges, Tomatoes, Cherries for crystallising, Loganberries, Raspberries and Strawberries, Passion Fruit.

C. M. BROOKE & SON,
Whiteman St., South Melbourne, Vic.

AMERICAN POWER GRADER "The Ideal" with bins, Sliding Case Stands, etc., in thorough working order, good as new. Will grade 3 varieties at one and the same time. Suitable for large packing Shed.

Full particulars and price apply,

Sunshine Stand Fruit Coy. Ltd.
Middleton, Tasmania.



Chassis complete with electric light, self-starter, mudguards, valances, running board, windscreen and five 33 x 5 special cord truck tyres..... **£475**

SPEED REO WAGON

The Fruitgrower's Rapid Transit System

FRUIT may spoil when transportation hesitates. Fleetness and get-there sureness are vitally necessary factors in the vehicle when any kind of perishable produce is the load.

Pneumatic tyres and proper balance give the Speed Wagon traction for the ploughed fields.

The famous Speed Wagon engine and spiral bevel gear axle give it fleetness which brings the market or cannery closer to home. Long springs and cord tyres keep road shocks from the easily spoiled load.

Certainty of performance, and endurance qualities for a quarter-million (or more) miles of service, are built in, because of:

—Inner frame anchoring of power units.
—Thirteen-plate clutch.
—Amidship mounted transmission.
—Super-powerful brakes.
—Vital parts 50% oversize.

The sum total is ECONOMY. On the basis of *lasting* economy *the Speed Wagon is the lowest priced commercial car in the world.*

Sole Victorian Distributors:

Queen's Bridge Motors Pty. Ltd.

Right at

QUEEN'S BRIDGE, SOUTH MELBOURNE

Telephone Central 4141

TRADE WITH CHINA.

American Firm Adopts Novel Methods to Popularise Its Product.

Dried Fruit in Penny Package Goes Big.

By courtesy of Mr. Stirling Taylor, Director of the Commercial and Industrial Bureau of the Board of Trade, Melbourne, we have received the following extract from "The Canning Trade," U.S.A.:—

That the purchasing power of the Chinese masses is higher than generally supposed, seems to have been effectively demonstrated in the successful and profitable introduction into China of a number of foodstuffs as well as other articles of commerce, purely American, says Commercial Attache Arnold, Peking, in a report to the Department of Commerce.

Several decades ago the idea was conceived of educating the Chinese to the use of tobacco in the form of cigarettes. Through enterprising methods of advertising and salesmanship the cigarette consumption in China has increased to between forty and fifty billion per year.

A California firm manufacturing a certain **dried fruit** has demonstrated the fact that it is possible to market its products to a very large degree in China. In fact, it is understood, that a large percentage of the products of this manufacturing firm is now marketed in China, the aggregate sales being nearly £200,000 a year. **This dried fruit in penny packages is finding its way into the shops of the interior cities throughout the country.**

An American firm manufacturing a cereal product is also meeting with considerable success in marketing its product among the Chinese. It has prepared cook books in Chinese, and also much other Chinese illustrated material helpful to the introduction of their product in such a way as to meet the peculiar demands and ideas of the Chinese people. Probably no people on the face of the earth have so varied a dietary as have the Chinese, and probably no other people have such an extensive menu as has China.

It is necessary, if one is to make any headway in the introduction of food products in China, to work with full knowledge of the peculiar conditions obtaining in that country. This means that the field must be investigated at first hand by competent persons, and the distribution must be in the hands of those who are peculiarly fitted for work of this character, and a modern advertising and salesmanship campaign adapted to Chinese conditions is necessary.

FRUIT NOT A LUXURY.

Science Conclusively Demonstrates that Fruit is Essential for Health.

Dr. J. S. Purdy (Sydney) recently delivered an important address in the sanitary science and hygiene section. He said he considered that nutrition on scientific lines was more important in the prevention of disease than any other contribution in preventive medicine.

The deficiency of vitamines, with a lack of balance in diet, retarded growth and nutrition, and was responsible for much gastric and intestinal trouble.

Fruit juices were, generally speaking, the sources of three classes of vitamines. Fruit was best eaten raw. Tomatoes, Gooseberries and Strawberries were said to be good for bronchitis and asthma, while Strawberries, Blackberries, Raspberries, Currants and Oranges had a similar reputation for rheumatism.

An Apple, as well as being a tonic laxative, was excellent for the teeth and gums.

Remarkable results were claimed for Grapes in certain wasting diseases and Bright's disease.

Raspberries and Strawberries cleared the blood of uric acid, and Oranges had achieved a reputation for curing influenza.

Figs and Dates were most nutritious.

Nuts were a perfect food, supplying proteids, fats, carbo-hydrates and salts concentrated. No lunch was a good rule, but failing this, an exceedingly light meal might be taken. Everyone should eat Raisins. If girls ate Raisins they would not need rouge.

Bee-Attitudes.

Schoolmaster: "What is the word beatitude?"

Pupil: "Please, sir, it means if you go near a beehive the bees will show their attitude towards you."

Latham Dehydrators

"STAND ALONE"

The "Rolls Royce" of the Artificial Drying World.

Some Installations for Foodstuffs.

Purchaser	Principal Prods.
Merbein Dehydration Trust, Mildura	**Sultanas Raisins etc.**
Tasmanian Dehydration Pty. Ltd. Bridgewater two plants.	**Apricots Prunes Apples**
Charles Martin, Yackandandah	**Prunes**
Swallow & Ariell Ltd. Port Melbourne.	**Carrots Turnips Cabbages, etc.**
Woorinen Co-op. Pack. Shed, Woorinen	**Sultanas Raisins etc.**
Aurora Pack. Co. Pty. Ltd., Irymple.	**Sultanas Raisins etc.**

D. J. LATHAM

157 Queen Street,

Melbourne, Australia.

LINING PAPER FOR FRUIT CASES

....WHITE OR CLEAN PRINTED NEWSPAPER....

is now available in large quantities for immediate delivery.

White, cut to size 13 x 42 or 18 x 25. Printed, uncut. Prices on application.

The printed news consists of "Argus," "Age," "Leader" and "Australasian" new, undistributed copies, and therefore is perfectly clean. Cases for fruit neatly lined have an increased selling value.

Prompt enquiries requested to

ESMOND RUSSELL, 60 Queen Street, Melbourne

DISTRIBUTORS TO THE FRUIT TRADE.

Also obtainable from all Western Market Agents, and LAWFORD'S FRUIT EXCHANGE, PTY. LTD., Doncaster.

Poultry Notes.

By Ian P. Hamilton.

PREPARE FOR THE SUMMER

NOW is the time to prepare for the coming of the hot summer months.

No time should be lost in taking steps to prevent the insect pests, such as lice and red mites, making sudden havoc amongst your stock. It is when the warm weather sets in that the eggs of insect pests hatch out, and therefore steps should be taken to destroy them immediately.

The eggs of red mites appear like a white dust upon the under side of perches, beneath nest boxes, or, in fact, anywhere where cover is afforded.

Whitewashing is a most essential element in the cleaning up and sweetening of poultry pens. Lime makes the house look much better, and, what is worth more, it exercises a great purifying influence. This effect is largely increased if a small quantity of carbolic acid is added to the wash. Always add salt, which will harden the coat of the whitewash, rendering it capable of standing longer than it otherwise would. Lime is best sprayed on with the patent force sprays, and just smoothed over with a brush.

After putting on solely with a brush it tends to crack and flake, and gives harbor for vermin. Little's liquid phenyle is also a splendid disinfectant, and is better for following after whitewash.

Lice irritate the bodies of the fowls, exhaust their vitality, diminish the egg yield, and are the cause, direct and indirect, of many deaths among chickens.

Clean, healthy fowls are rarely troubled with lice. The run of dust baths and judicious feeding help to combat them.

See that dry dust baths are always accessible to the birds in the winter, and moist ones in the summer.

Insectibane or Little's Phenyle Powder dusted on the feathers will remove body lice. They are usually about the vent, under the wings, or on the neck of the fowl, and these parts should receive special attention.

Spraying the perches with Little's Phenyle or caustic soda will settle night bugs. If birds appear mopey, always handle and search for lice. Keep the shed and perches syringed with a disinfectant once a fortnight during the summer and early autumn months.

It is a good plan to throw lime loosely over the yards attached to any of the pens, and then hose the ground all over. The lime will sweeten it up wonderfully.

See that no sour food is allowed to lie about in the sun, and that the water is changed frequently and never allowed to become heated and stagnant. Such neglect is usually the forerunner of diarrhoea and other ailments, which, if allowed to enter, may play havoc in the poultry yards.

Mixing the Morning Mash.

Many poultry-farmers make unnecessarily hard work of mixing the morning mash, comments the Poultry Expert of the N.S.W. Department of Agriculture. In this, as in most things, there is a right and a wrong way, also a laborious way and an easy way. To mix up a mass of pollard, bran, and the other constituents of the mash dry, and then wet it, is not only the most laborious method, but it scarcely ever results in a mash of the right consistency; on the other hand, it often produces a sticky mass.

The more simple and easier way is to place the pollard round the tub, or in the case of a proper mixing trough, at each end, and then to put the bran with the meat meal or other concentrates in the depression in the middle. Over this pour the hot water or whatever liquid is used. The bran and concentrates, being the coarser and least sticky bodies, can be stirred up into a wet mash like porridge. When well mixed the pollard should be gradually introduced and worked up with the hands, or in the case of a large quantity with some tool. A four-pronged hoe or an ordinary garden four-pronged fork are excellent tools for mixing up to a point, and then the mixing should be finished off with the hands.

In this way one man can mix sufficient to feed 1,000 adult birds in less than half an hour, and the mash will be superior to one where the ingredients are mixed before wetting. Try it.

Bee-Keeping.

Honey as a Food.

EDUCATIONAL CAMPAIGNS in are becoming increasingly connection with fruit and milk favoured by the producers of those commodities" (says the "Ararat Advertiser"), but what about the virtues of honey as a food. Honey is practically the only food that is immediately absorbed into the system and leaves no residue; in its digestion there is no exertion on the part of the stomach.

"Many medical men say that we eat too much sugar, and that if a larger portion of our sugar diet was composed of honey, the health of the community in general would be improved. Since honey is so easily assimilated, and contains valuable food matter, it is a most desirable sweet for children. Honey is a food in which practically none of the organisms that produce the known serious diseases of the human system can exist. It will keep good for years, and is not subject to infection or deterioration with ordinary care.

Which is the Best Honey?

"I got a repeat order from a grocery for honey" (says M. Shallard, in "American Bee Journal").

"I did not know what quantity they had previously, so I sent some first class light honey, and it was sent back, 'as the customers did not like it.'

"It turned out that they had previously been supplied with very dark, strong honey, and the customers having acquired a taste for it, would have no other.

"I have found that quite a proportion of the customers prefer a dark honey, and are quite willing to pay a fair price for it. We do ourselves and our trade harm when we quote or allow our agents to quote, 'dark and inferior' in the market reports.

"All honey is not only good, but the best of food, and we should leave it to the people to choose, and not be eternally telling them that dark honey is inferior to light."

WHY TIMID PEOPLE GET STUNG.

Scientists say the nerves of the body emit an odour when one is frightened which is detected by bees and many animals. Most of us have learned how disastrous it is to show signs of "cold feet" in an apiary. We advise a bee veil if the fellow who goes into the apiary unprotected is over-afflicted with self-confidence. —"G. B. Lewis Co.'s Bulletin."

"SHORT MOVES."

If it is necessary to move the bees a short distance in early spring, choose cool weather preceding a storm, if possible. Move the bees on a wheelbarrow towards evening,

Make Certain of . . . Next Winter's Profits

Now is the time to set out with a strong determination to make next winter a period of the heaviest profit in your history as a poultry man. You can do it easily and economically —at the cost of a half-penny per day for every twelve fowls.

Whether you keep 100 birds or 5,000, a halfpenny per dozen per day is not a heavy premium to pay when it insures against disease and loss of profits; when it means a quick and thorough moult; and when it gives your birds that energetic good health so valuable in show or breeding stock.

All these benefits are yours at such insignificant cost—a halfpenny per day for every 12 birds.

More than 500,000 poultry keepers know and use this method consistently. It is recommended by such men as C. A. House, Will Hooley, and by winners of such competitions as the Harper-Adams; Champion of India and many other important competitions. It necessitates simply the mixing of one tablespoonful of Karswood Poultry Spice to every twenty birds in the wet or dry mash.

Start NOW! Get a 1/- packet of Karswood from your local man and test it out on half a dozen birds. Watch the results for a week or two —and you will convince yourself that the signs of health and energy are true indications of the value of this recognised adjunct to poultry keeping.

Read the letters set out hereunder:

Mr. C. A. House speaks:—

"In my opinion, and I speak after a severe test, fanciers may use Karswood Poultry Spice with confidence. Unlike the general run of Poultry Spices, it is not heating. Its chief ingredient is one of the best tonics known to mankind, and the result it produces is obtained not by overheating and excessively stimulating the body, but by enriching and toning the blood, bringing all the nervous system into a state of healthy vigour, and thus, by natural means, giving a largely increased egg production.

After a long series of tests specially conducted by Mr. Will Hooley, F.R.S., the chief expert of the "POULTRY WORLD" (of which I am the Editor), it was found that not in one single instance could any ill-effects be traced to the use of Karswood Poultry Spice, but that, on the contrary, nothing but good had resulted, the whole of the birds being in better condition than at the beginning of the test. This was shown, not only by the activity and the virility of the birds, but also by the perfectly normal and natural condition of the internal organs of the bodies of a number of the birds which were specially killed for the purposes of the test.

As to the question—"What about the differing conditions of Australia and England?" I can only say that, speaking from experience of Western Australia, South Australia, Victoria and New South Wales, it is my firm conviction that Karswood Poultry Spice should prove of equal value to the breeders of Australia as it is to the breeders of England.

You ask "Why?" Because, from what I have seen of your stock and your climate I conclude the latter is quite as trying to the constitution of the birds as is that of England, and the use of a tonic such as Karswood Poultry Spice, given, not with every meal and every day of the 365, but at intervals, would be most beneficial, and tend to improve the health, virility and productiveness of the stock.

One word of caution would I give: Karswood Poultry Spice should be used according to the instructions sent out with every packet. Too much does harm rather than good. Used as directed by the manufacturers, nothing but good can result from its use."

From a Prominent Fancier.

Model Poultry Yards, Merewether, via Newcastle.

Dear Sir,—

This is to certify that I have used your KARSWOOD POULTRY SPICE and for getting birds into show condition and health I find nothing better, also to increase the egg yield.

I am an exhibitor in all the leading shows in N.S.W. and can recommend Karswood Spice to all who wish to be amongst the winning cards, also to keep their flocks in the best of health and condition and to keep the egg boxes full.

You may use this as a guarantee of my faith in Karswood Spice as I am one of the leading fanciers in N.S.W. and am known all over the world. See if this is of any use to you as a testimonial. I shall be pleased to see it amongst your advertisements.

Yours faithfully,

(Sgd). C. A. Clarke.

This Man Knows.

Rockford Road, Tahmoor, N.S.W.

Dear Sir,—

I hope I shall now be able to forward more consignments, as I find Karswood Poultry Spice assists the fowls through their moult, and brings them on laying much quicker.

I am sorry I was short of this Spice last month, but hope to keep it up to them in future.

(Sgd.) C. E. Carter.

Every Claim Supported.

Dear Sirs,—

In the interests of breeders and Poultry keepers generally, I feel constrained to briefly state the result of my experience with your Karswood Poultry Spice.

During the past six months I have supplied this product to some hundreds of my customers and find that their testimony of the excellent results accruing from its use is almost unanimous. The evidence thus obtained has borne out in a most complete and convincing way the correctness and truth of every claim that has been made for Karswood Spice; and with the full endorsement of personal experience it is my belief that Karswood Spices will prove the most valuable aid to modern poultry culture yet introduced.

Faithfully yours,

(Sgd.) W. W. C. Carter (late with A. Hart, Chief Poultry Expert, Dept. of Agriculture, Victoria).

Note the Economy.

1/- packet supplies 20 hens 16 days.
2/- packet supplies 20 hens 32 days.
13/- tin (7lbs.) supplies 140 hens 32 days.
14lb. tins 25/- 28lb. tins 48/-.

MAKES 12 HENS LAY FOR ½d. A DAY.

MAKE THIS TEST.

Go to your local grocer, storekeeper or produce dealer. Get a 1/- packet of Karswood Poultry Spice (containing ground insects). Give it to half-a-dozen birds in accordance with the instructions on the packet. Do not expect immediate results. Karswood works naturally—not suddenly. Within a fortnight or three weeks you will see excellent results and you will join the ranks of over half-a-million daily Karswood users without further delay.

Agents for Victoria.

Henry Berry & Co. Pty. Ltd., Collins St., Melbourne.

and throw some grass or brush over the entrance to make the bees relocate.—"Beekeepers' Review."

Pig Rearing.

Some Ailments and Treatment.

IN one sense pigs are more subject to disease than most farm animals. In another sense it can probably be said that they are able to withstand conditions which in other farm animals would result in disease and death. Mr. George H. Cann makes these observations in the "Live Stock Journal," and gives some useful hints for the treatment of pigs affected with different ailments.

One way to prevent loss from disease, he says, is to see that the breeding animals are good healthy types, with the right kind of framework, and the strong constitution and vigour that may be transmitted to their progeny. Immature sows, or ones with faulty conformation, especially in those parts of the body that provide space for the vital organs.

Sows with narrow chests, sway backs, and other defects, will not farrow as strong and healthy litters as sows that are of a vigorous, healthy type.

Worms, says Mr. Cann, are responsible for a great many losses, and the most common is the round worm. It is taken into the system in the form of microscopic eggs, which hatch out in the stomach and intestines, bore through into the blood vessels, are carried up into the lungs, where they cause the typical cough of the wormy pig, are then coughed up and re-swallowed, and after a tendays' trip through the body, settle down again in the intestines. At the present time the three most effective remedies are Santonin oil of chenopodium, and perhaps carbon tetra-chloride. Any worm remedy that is effective is a poison.

The breeder who worms his pigs without first taking them off feed at least twenty-four hours and giving them a good cleaning out, and who does not follow the use of the worm remedy with another such good laxative as Epsom salts, castor oil, etc., is likely to have trouble. Worm remedies are sometimes fed in slop or mixed with the feed, but this method is rather uncertain, since usually the wormiest and least healthy pig will eat the least of the preparation.

Sometimes worm remedies are prepared in a mixture which is quite

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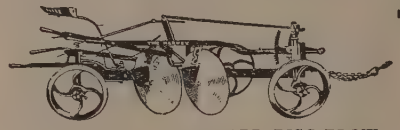

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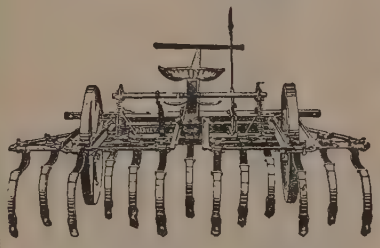

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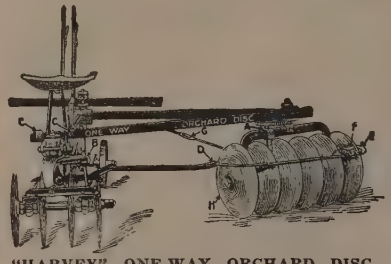

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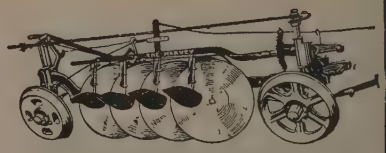

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palatable to the pig, and the dose is thrown to the pig with the idea that he will gobble it up and thus get his own proper dose. This is a very slow method, however, since it practically means that each pig must be let out of a pen separately, pick up his dose of worm remedy, and consume it. Giving worm capsules or worm tablets individually to the hogs is much more certain, but involves quite a lot of active exercise on the part of the farmer.

The tablets or capsules are given in two ways. In both instances the pig's jaws are spread apart with a mouth gag or spreader. Some use a balling gun, and this is entirely satisfactory if care is used. Many pigs have, however, been lost because the person giving the worm remedy jambed the gun down the throat, causing an injury which resulted in inflamation and a gangrenous condition of the throat.

SUPPURATIVE OTITIS.

An Ear Disease of Pigs.

A condition has been noticed fairly commonly among pigs (write officers of the Glenfield Veterinary Research Station, New South Wales), in which the most prominent symptom is a peculiar alteration in the carriage of the head, accompanied frequently by unsteadiness of gait. The disease is seen usually in young pigs from a few weeks up to 3 or 4 months old. The reason for the relative infrequency of occurrence in older pigs is possibly that young pigs are more prone to catarrh (which appears to be the forerunner of the condition), and that affected animals suffer such loss of condition that they die or are killed as "runts" or "bad doers."

Symptoms.

The most characteristic symptoms are the abnormal method of the carriage of the head and the interference with equilibrium and sense of direction. The head is twisted or rotated to one side or the other, so that one ear (the affected one) is depressed, such depression becoming more marked as the condition advances. It is noticed that the animal when walking about tends to circle in one direction, this being towards the side to which the head is depressed. At times this tendency to circle is not apparent, but it is noticed that when moving the animal does so with an awkward gait, while the head is moved from side to side in an unbalanced manner. Affected animals may also exhibit considerable difficulty in going straight up to the feeding trough, having to make several attempts before gauging the right direction. It has frequently been noticed that the condition is accompanied by discharge from the nostrils and eyes.

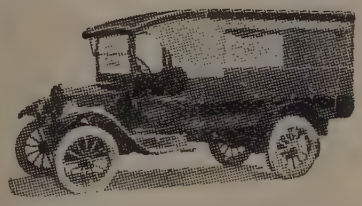
In advanced cases there are very apparent disorders of equilibrium, the gait becoming unsteady and somewhat inco-ordinated, and the animals may fall into the trough and be unable to get out again. Affected pigs are usually found to be "poor doers," showing a scurfy condition of the skin, lack of lustre of the hair, and poor condition. The appetite is capricious. In some cases examination of the affected ear reveals a considerable amount of yellowish-brown or brown sticky discharge adhering to the inner surface of the ear.

Cause and Prevention.

Examination of several pigs showing such symptoms has revealed the presence of a suppurative condition affecting the middle ear. Examination of the pus shows the presence of bacteria such as are commonly met with in other suppurative conditions in the pig. It is probable that in these cases they gain entrance to the deeper structures of the ear by way of the narrow passage (called the eustachian tube) which leads from the back of the throat to the middle ear, and from the comparative frequence of nasal catarrh in young pigs it is probable that this ear disease is an extension of this inflammatory process affecting the lining membrane of the nasal passages.

Once the condition is established it is unlikely that any treatment will be of use. Syringing of the outer ear will remove the obvious discharge, but will not penetrate into the deeper structures from which the pus arises.

While the disease cannot be definitely prevented, all possible means, such as proper attention to cleanliness and housing, should be undertaken in order that chills may be avoided. Diet should also be attended to, as it is found that this also plays a not unimportant part in the causation of those diseases, such as catarrh ("snuffles") and pneumonia, with which the condition is frequently associated.



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BUY CHEVROLET TRUCKS because Chevrolet trucks are easy to drive. The controls are conveniently arranged and easy to operate. The equipment includes all needed devices for comfort and safety.

1-Ton Truck Chassis £235
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VICTORIA AND
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The Fruit Trade

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COMPARATIVE WEIGHTS AND MEASURES.

English Fruit Weights.

Apples, sieve is equal to 1 bushel, generally 38 lbs.
Cherries and Currants, ½ sieve equal to 24 lbs.
Gooseberries, Plums, ½ sieve, equal to 28 lbs.
Pears, sieve, equal to 50 to 56 lbs.

Foreign Weights.

Apples; Canadian, barrel, equal to 140 lbs.
Apples, American and Nova Scotian, barrel, equal to 120 to 130 lbs.
Pears, Californian case, equal to 40 lbs.

British, Foreign and Australasian Market Reports.

Great Britain.

The Fruit, Flower and Vegetable Trades' Journal reports under date August 9, 1924, as follows:—Apples—English Apples, 4/- to 10/-. Oranges—South African Seedlings, per case, 17/6 to 20/-; Seedless, per case, 17/6 to 20/-. Peaches—English, best, per doz., 10/- to 15/-; English, medium, per doz., 2/6 to 6/-; Californian, 100's, 200's, per case, to 20/-. Pears. 1/6 to 7/- per crate. Grapes, 1/3 to 7/- lb.

Messrs. G. Da Costa report under date August 8th as follows:—South African Produce—Oranges, Navels, box, 20/- to 23/6; Seedlings, 18/- to 22/-. American Produce—Oranges, Californian Valencia, box., 23/- to to 28/-. Apples, Duchess Virginian, barrel, 40/- to 46/-; Californian Gravensteins, case, 18/- to 23/-.

New South Wales.

Sydney (26/9/24).

Mr. F. Chilton, City Fruit Markets, Sydney, reports as follows:—

Queensland Fruits.—Bananas, 16/- to 30/-; Pines, smooth, 11/- to 14/-. New South Wales Fruits.—Bananas, Tweed River, 16/- to 30/-; Lemons, 3/6 to 7/-; Oranges, common, 4/- to 10/-; Navels, 12/- to 17/-; Mandarins, Emperor, 5/- to 18/-; Sevilles, 3/- to 5/-; Apples, Granny Smith, 14/- to 22/-; Passions, 3/- to 13/- per half case; Loquats, 3/- to 11/-. Victorian Fruits.—Apples—Jon., 11/- to 17/-; Pears—Keiffer's, 5/- to 7/-; Jos., 14/- to 20/-; W.C., 10/- to 18/-; W.N., 12/- to 18/-; P.T., 12/- to 16/-. Tasmanian Fruits.—Apples—Jon., 10/- to 18/-; S.T.P., 10/- to 15/-; Dem., 14/- to 20/-; French Crabs, 12/- to 17/-; Crofton. 14/- to 20/-; S.P.M., 10/- to 17/-; W.C., 4/6 to 7/6 per half case. South Australian Fruits.—Apples—Cleo., 12/- to 15/-; Jon., 12/- to 17/-; R.B., 12/- to 17/-; S.P., 9/- to 14/-.

The demand continues firm for all lines of good quality, but inferior fruit is difficult to sell even at low prices. Values generally are likely to increase till the end of the current season, in view of the scarcity of fruit stocks available.

Victoria.

(29/9/24).

The following are the wholesale quotations ruling at the Western Market:—Apples—Good to choice eating, 8/- to 12/-; good to choice cooking, 8/- to 12/-. Lemons—Victorian, 6/- to 9/-. Mandarins—New South Wales, 10/- to 20/-. Oranges—Murray Valley, 10/- to 12/-; New South Wales, 8/- to 10/-; Navels, South Australian, 14/- to 16/-; Murray Valley, 12/- to 14/-; others, 8/- to 13/-. Passion-fruit—Victorian and New South Wales. 12/- to 20/-. Pineapples—Queens, 10/- to 12/- double case.

The V.C.C.A. Market Representative reports as follows for the week ending 20th September:—The demand for all citrus fruits has fallen off considerably. This is mainly due to retailers finding difficulty in disposing of stocks purchased at high rates. Only the choicest brands are moving at all freely. Second quality and fruit inclined to show waste is very hard to dispose of at reduced rates. Navels—Special, 17/-; choice, 13/- to 15/-; standard, 9/- to 12/-. Mandarins—Special, 15/-; choice, 13/- to 15/-; small or rough, not wanted. Commons—Choicest, 10/- to 12/-; medium, 7/- to 9/-. Lemons, slow of sale, 6/- to 8/-.

West Australia.

Perth (29/9/24).

Apples—Granny Smiths, to 21/6; Yates, special, to 22/-; Medium, to 17/6; small, to 14-; Chandlers, to 18/6; Romes, to 17/9; Statesman, to 19/-. Oranges — Navel, Prime Dunne's, to 16/-; others, to 12/-; Mandarins, special, to 14/-. Lemons, to 6/-; Cape Gooseberries, to 6d.; Strawberries, to 19/9; Passion-fruit, to 18/-; Loquats, to 11/6.

South Australia.

Adelaide (25/9/24).

Apples—Cleos., 10/- to 12/- case; eating, 10/- to 12/-; cooking, 8/- to 12/-; Bananas, 28/- to 30/-; Lemons, 7/-; Melons (Pie), 5/- to 6/- per cwt.; Oranges, common, 8/-; Blood, 10/-; Mandarin, 16/-; Navel, 13/-; Poorman, 7/-; Passion-fruit, 32/-; Pears, eating, 10/- to 12/-; cooking, 8/- to 9/-; Pineapples, 17/-.

Queensland.

Brisbane (27/9/24).

Cavendish Bananas, 6½d. to 8½d. doz.: Apples, Victorian, J.O.N., 16/- to 22/- a bushel case: M.F., 17/- to 19/-; Yates, 20/- to 22/-; F.C., 16/- to 21/-; Schroeders, 18/- to 21/-; R.B., 15/- to 20/-; Statesman, 16/- to 18/-; Tasmanian, S.T.P., 15/- to 18/-; South Australian, Rokewood, 17/- to 19/-; Pears, Victorian, 20/- to 22/-; W.N., 16/- to 20/-; B.P., 14/- to 17/-; Oranges, local, common, prime, 7/-

to 9/-; small, 5/- to 7/-; Valencia Lates, prime, 9/- to 10/3; others, 5/- to 8/6; Mandarins, local, 20/-; Sydney, prime, 18/- to 20/-; medium, 10/- to 13/-; Lemons, South Australian, 14/6 to 15/6; local, prime, 3/6 to 5/-; Passion-fruit, prime, 12/- to 14/-; others, 9/- to 11/-; Strawberries, specials, to 17/- a dozen boxes; Pineapples, Ripley, 3/- to 8/- a dozen; smooth, 2/6 to 5/6; Ripley, 10/- to 12/- a case (included); smooth, 4/- to 8/-.

New Zealand.

Dunedin (12/9/24).

Messrs. Thos. Paterson & Co. report as follows:—

Steady consignments of citrus fruits have been coming to hand from Australia. The "Moeraki," and the "Canadian Constructor" brought medium consignments on to our market during the past week. Oranges are still in very fair demand, and are realising from 20/- to 22/- per case, poorer qualities from 14/- to 17/- per case; Navels, from 17/- to 24/- per case. Lemons—The market is oversupplied at present, and these are realising from 10/- to 15/- per case; Mandarins, from 21/- to 25/-; Passion-fruit, from 18/- to 20/- per case. There is a good demand for Navels packed in imperial bushel cases, and we anticipate good prices by the next "Moeraki."

Reilly's Central Produce Mart report: —All lines of fruit and produce meeting a good demand, with high prices ruling for choice dessert Apples. The "Canadian Constructor" brought a small shipment of Australian Oranges which realised good values. Pears:

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J. H. MORTON, A.M.I.M.E.
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Winter Cole's, 4½d. to 5½d.; Winter Nelis, 5d. to 6d.; cooking, 3d. Apples: Delicious, 16/- to 18/-; Statesman, 12/6; Sturmers, 10/6 to 14/-; Democrats, 14/- to 17/-; Choice cookers, 10/-; Lord Wolseley, 11/6; Oranges: Australian Navels, 20/- to 22/6; American Lemons: 50/-; Melbourne, 20/-; N.Z., 12/- to 14/-. Marmalade Oranges, 13/-; Mandarins, 23/-; Grape Fruit, 20/-; Pineapples, 18/6 to 21/-; Bananas, ripe, 35/-; Rarotongan, green, 22/-; Prizewinner Tinned Pines: Slices, 7/9; Cubes, 8/-.

Tasmania.

Hobart (27/9/24).

Delicious, 2⅝ inch, No. 1, 19/-; 2½-in do., 18/9; S.T.P., No. 1, good, 11/- to 11/6; fair do., 9/- to 10/3; slightly marked do., 6/- to 7/6; other spotty and inferior lots do., 3/6 to 5/6; F.C., spotty, 2/- to 3/6; Democrats, spotty, good colour, to 13/3. Pears: G.M., 10/8 to 11/9 case; Beurre Bosc, 6/- to 6/6 per half-case.

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Mr. T. A. Dickson, Chemist, Geelong. Dear Sir,—Just a line to thank you for your wonderful A.M.S. I have used several bottles, and am now almost quite recovered from the indigestion I have suffered from for years, and the almost Chronic Neuritis in my wrist and knee. Wishing you all success with your splendid A.M.S., yours gratefully, Edith H. Primrose, Park-street, South Yarra. Sold by all chemists and country storekeepers at 3/- per bottle, by post 3/6. Manufactured by T. A. Dickson, Chemist, Geelong, Vic.

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Blood and Bone	*Ammonia and Phosphate*	*Nitrate of Soda*
Real Bird Guano	*50 Phosphate*	*Sulphate of Potash*
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Big Horticultural Development

Proposed "Garden Week" in Melbourne.

A PROPOSAL which has far reaching effects for good is now under very earnest consideration in Victoria. If the plans as suggested are carried through, it will probably mean the biggest amalgamation of horticultural interests that has yet been witnessed.

The idea is to hold a "Garden Week" in Melbourne next autumn, the whole of the proceeds to be devoted to the Cronin Memorial Fund.

Proposed Garden Week.

March 30th to April 3rd, 1925.

General Outline.

(1) Portion of the space to be taken up with Horticultural Trade exhibits, and by exhibits from the suppliers of horticultural sundries, etc.

(2) The several specialist flower societies to make their seasonable displays on different days of the week, thus:—Roses one day, Carnations another, and so on with Dahlias, Gladioli, Chrysanthemums, etc., each Show Committee to conduct its usual programme, and to be responsible for the staging of the exhibits. Friday to be "Flower Day," when sales of flowers are to be conducted in the city streets.

(3) Other exhibits to include fruit displays by growers' associations, and the Department of Agriculture. It is also anticipated that there will be a display of tropical fruits by the Queensland Government.

(4) Provision to be made for exhibits from suburban and country horticultural societies, also exhibits from the Orchid Club, the Flower Growers' Association, the Retail Florists' Association, etc.

(5) Lectures to be given by experts on horticultural topics, so arranged that the lectures fit in with the particular flowers being displayed. Demonstrations also to be given in the art of arranging flowers, fruit bottling, etc.

(6) It has been suggested that a plant drawing and naming competition by school children could be conducted.

(7) If thought advisable, a "Field Day" could be conducted at the Botanical Gardens or elsewhere on the Saturday afternoon.

The running expenses would be covered by the rent of the spaces taken by the several exhibitors. The Exhibition will attract many thousands of visitors, and without doubt, a very substantial sum could be collected for the Cronin Memorial Fund.

The foregoing draft programme was adopted at the last meeting of the Cronin Memorial Fund Committee, and arrangements are now being made for a conference of all the Victorian Horticultural Societies. This conference will take place at the Melbourne Town Hall on Wednesday, October 22nd, at 8 p.m., when the Lord Mayor will preside.

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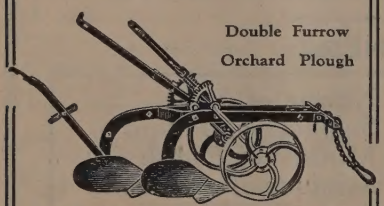
Double Furrow Orchard Plough



Weighs only 2 cwt. Can be fitted with knife or circular coulters. Works right up to trees, both ways. Ample strength. The handiest orchard plough on the market.

Liberal extended terms if desired

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Reliable Representatives wanted for the other States.

SPRAYING "DON'TS."

By W. J. Allen, Fruit Expert, N.S.W. Department of Agriculture.

The orchardist will do well to carefully consider the following points:—

Don't fail to spray every season. It is impossible to determine in advance whether or not the tree will be attacked. Proper spraying is never injurious.

Don't fail to follow carefully the Spray Calendar and formulae. If you do not, it would be better not to spray, as you are liable to do more harm than good.

Don't apply winter strength sprays in summer, else disastrous results will follow.

Don't apply summer strength in winter, or the weaker mixture will only be a source of disappointment.

Don't wait till the fungi have attacked plant or tree; the fungicides are merely preventives, and should be used early in the spring. After the disease has developed, it may be too late to save the plant.

Don't spray during or just after a shower, or when there has been a heavy dew. Much of the solution will be washed off or it will collect in spots. Wait till the leaves are dry. Poison is more effective when applied to the leaves when dry.

Don't spray when the sun is very hot, or you may scald the foliage.

Don't spray on top of the leaves only; spray the under sides where the pests hide, and be particular to keep your liquid thoroughly agitated.

Don't give up spraying because you do not think you see any benefit from your work. Perhaps you did not spray early or late enough to prevent the damage; perhaps you did not use the right formula, or were not careful in its preparation; perhaps you did not spray thoroughly or often enough. Try again.

Don't buy a cheap sprayer. It will always be out of order. It will make the labor many times greater, and in the end will cost more than a good one.

Don't buy a bucket sprayer and expect to spray an orchard with it. Buy a machine large enough to do your work quickly and easily.

Don't put your sprayer away after using it, until you have thoroughly cleaned out all the spraying mixture. If this is left in, the pump will be injured and the glands and valves clogged.

Don't start out to spray until you have carefully examined your sprayer to see that it is in good working order.

Don't spray only the trees from which you expect to get marketable fruit. Spray all the trees, otherwise the trees you go to the trouble to spray early in the season may become infected later by the unsprayed trees. "An ounce of prevention is worth a pound of cure."

Don't neglect to strain all solutions before using, else valves and nozzles may be clogged.

MELBOURNE ROYAL SHOW.

Interesting Exhibits.

Apart from the excellent fruit displays at the Melbourne Royal Show, growers had much to interest them in the many other exhibits staged by the various machinery merchants and manufacturers. Demonstrations were given throughout the Show by the manufacturers of the "Lightning" and the "Guider" and the "Ellisizer" fruit graders. These machines are made in a number of models to suit all classes of fruits, and special efforts have been made to suit the orchardists' requirements. An American grading machine was also demonstrated by the International Harvester Company.

Motor and hand spray pumps were shown by various manufacturers. The "Bave-U," "Cooper," "Sunspray," "I.H.C.," "Nufrend," "Kangaroo" and Myers' pumps were all represented.

The orchardist is well catered for in the matter of cultivators and plows, either for horse or tractor pull, and many new features in the various implements on the market were noted with interest. Mr. D. Harvey's exhibit, which contained a complete

Safety First
to Foliage

Save Your Crops
from
BUGS AND BLIGHTS

DRY DUST YOUR VINES AND TREES
WITH
GREEN CROSS SULPHO-ARSENATE POWDER

It protects from many forms of Plant Disease
— and —
Destroys Leaf-Eating Insects in One Operation.

NO WATER REQUIRED

Can be supplied in 1-lb Sifting Top Packets and 25-lb, 50-lb and 100-lb Drums.

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Pty. Ltd.
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STONE FRUITS
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A Good Start means Everything!

BEFORE PURCHASING send for Lasscock's Catalogue and prices. These South Australian grown trees are unsurpassed for hardiness, healthiness, and vigor. They will jump from the start and bring profit to the grower. Our stocks are excellent and prices right. Special attention is given to packing.

LASSCOCK'S NURSERIES Henley Beach Road, LOCKLEYS, STH. AUSTRALIA

range of orchard implements, was a centre of attraction. Other interesting displays were staged by the International Harvester Co., Massey-Harris Co., Mitchell & Co., H. V. McKay and McPherson's Pty. Ltd. Motor lorries, which are becoming more and more into favor with orchardists, were much in evidence, the chief of these being the "Ford" one-ton truck, Chevrolet one-ton truck and light delivery truck; Reo speed waggon, and others.

Tractors were demonstrated and the fine points explained in response to numerous inquiries. The "Fordson," "Case," "Cletrac," and a number of others were of particular interest.

Refrigerating machinery, which has played such a big part in the development of the fruit industry, was shown by Messrs. R. Werner & Co. Pty. Ltd.

The demonstrations of tree and stump pullers by Messrs. Trewhella Bros. and Multigears Pty. Ltd. also attracted much attention, and the suitability of these machines for their particular work was ably demonstrated.

The wonderfully quick and effective little machines for strapping fruit cases to ensure their safe delivery, exhibited by the Gerrard Wire Tying Co. and Murray & Lemon (Ti-it machine) were favorably commented upon. Many inquirers expressed surprise at the quickness and neatness of the operation.

The Sulphate of Ammonia Committee supplied much valuable information in regard to nitrogenous fertilisers to the numerous inquiries from growers. The value of this fertiliser is evidenced by the fact that the consumption this year is double that of last.

Orchardists on the look-out for further information in regard to fruit tree and vine spraying methods were well catered for by the various spray material manufacturers. The following brands were all represented:—"Swift's," "Elephant," "Vallo," "Electro," "Blue-Bell," "Carlton," "Green Cross," "McDougalls," Black Leaf 40, Neptune and Harbas Spraying Oil.

Space does not permit the describing of each exhibit in detail, but the foregoing covers most of the lines which were of interest to orchardists.

Orange (N.S.W.), 14th August, '24.

I find the "Fruit World" good, and always up to-date. Wishing you success. (Sgd.) W. R.D.

SPRAY MATERIALS

Of QUALITY and PROVED EFFICIENCY, including

Arsenate of Lead in paste and powder forms.

ATOMIC SULPHUR

Recommended by the Department of Agriculture, N.S.W., for the control of

Powdery Mildew on Apples

and PROVED IN VICTORIA to be capable of controlling

Brown Rot on Peaches

And Other Stone Fruits.

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